

1
 RIEGER, Francois <120> NUCLEIC ACID SEQUENCE AND DEDUCED PROTEIN SEQUENCE FAMILY
 WITH HUMAN ENDOGENOUS RETROVIRAL MOTIFS <130> 200936US0PCT <150> PCT/FR99/01513 <151>
 1999-06-25 <160> 122 <170> PatentIn version 3.1 <210> 1 <211> 2599 <212> DNA
 <213> Homo sapiens <400> 1

atccctgcc ttaatcgcca agctccttca ggagaacaaa gaacaggcca ttaccctgga	60
gaagactggc aactgatttt acccacaagc ccaaacctca gggatttcag tatctactag	120
tctgggtaga tactttcacg gggtgggcag aggccttccc ctgtaggaca gaaaaggccc	180
aagaggtaat aaaggcacta gttcatgaaa taattcccag attcggactt ccccgaggct	240
tacagagtga caatagccct gctttccagg ccacagtaac ccaggaggta tcccaggcgt	300
taggtatacg atatcactta cactgcgcct gaaggccaca gtcctcaggg aaggctcgaga	360
aaatgaatga aacactcaaa ggacatctaa aaaagcaaac ccaggaaacc cacctcacat	420
ggcctgctct gttgcctata gccttaaaaa gaatctgcaa ctttcccaa aaagcaggac	480
ttagcccata cgaaatgctg tatggaaggc ccttcataac caatgacctt gtgcttgacc	540
taagacagcc aacttagttg cagacatcac ctcttagcc aaatatcaac aagttcttaa	600
taacattaca ggaacctatc cctgagaaga gggaaaagaa ctattccacc ctgttgacat	660
gtattagtc aagtcccttc cctctaattc cccatcccta gatacatcct gggaaggacc	720
ctaccagtc attttatcta cccaactgc ggttaaagtg gctggagtgg agtcttggat	780
acatcacact tgagtcaaat cctggatact gccaaaggaa cctgaaaatc caggagacaa	840
cgctagctat tcctgtgaac ctctagagga tttgcgcctg ctcttcaaac aacaaccagg	900
aggaaagtaa ctaaaatcat aaatcccat ggccctccct tatcatattt ttctctttac	960
tggtctttta cctcttttca ctctactgc accccctcca tgccgctgta tgaccagtag	1020
ctccccttac caagagtttc tatggagaat gcagcgtccc ggaaatattg atgccccatc	1080
gtataggagt ctttctaagg gaacccccac cttcactgcc cacaccata tgccccgcaa	1140
ctgctatcac tctgccactc tttgcatgca tgcaaatact cattattgga caggaaaaat	1200
gattaatcct agttgtcctg gaggacttgg agtcaactgtc tgttggaactt acttcacca	1260
aactggtatg tctgatgggg gtggagttca agatcaggca agagaaaaac atgtaaaaga	1320
agtaatctcc caactcacc gggtacatgg cacctctagc ccctacaaag gactagatct	1380
ctcaaaaacta catgaaaccc tccgtaccca tactcgctg gtaagcctat ttaataccac	1440
cctcactggg ctccatgagg tctcggccca aaaccctact aactggttga tatgcctccc	1500
cctgaacttc aggccatatg tttcaatccc tgtacctgaa caatggaaca acttcagcac	1560
agaaataaac accacttccg ttttagtagg acctcttggt tccaatctgg aaataaccca	1620
tacctcaaac ctcacctgtg taaaatttag caatactaca tacacaacca actcccaatg	1680
catcagggtg gtaactcctc ccacacaaat agtctgccta ccctcaggaa tattttttgt	1740

ctgtggtacc	tcagcctatc	gttgtttgaa	tggctcttca	gaatctatgt	gcttcctctc	1800
attcttagtg	ccccctatga	ccatctacac	tgaacaagat	ttatacagtt	atgtcatatc	1860
taagccccgc	aacaaaagag	tacccattct	tccttttggt	ataggagcag	gagtgttagg	1920
tgcactaggt	actggcattg	gcggtatcac	aacctctact	cagttctact	acaaactatc	1980
tcaagaacta	aatgggggaca	tggaacgggt	cgccgactcc	ctggtcacct	tgcaagatca	2040
acttaactcc	ctagcagcag	tagtccttca	aaatcgaaga	gcttttagact	tgctaaccgc	2100
tgaaagaggg	ggaacctgtt	tatttttagg	ggaagaatgc	tggtattatg	ttaatcaatc	2160
cggaatcgtc	actgagaaaag	ttaaagaaat	tcgagatcga	atacaacgta	gagcagagga	2220
gcttcgaaac	actggaccct	ggggcctcct	cagccaatgg	atgccctgga	ttctcccctt	2280
cttaggacct	ctagcagcta	taatattgct	actcctcttt	ggaccctgta	tctttaacct	2340
ccttggttaac	tttgtctctt	ccagaatcga	agctgtaaaa	ctacaaatgg	agcccaagat	2400
gcagtccaag	actaagatct	accgcagacc	cctggaccgg	cctgctagcc	cacgatctga	2460
tggttaatgac	atcaaaggca	cccctcctga	ggaaatctca	gctgcacaac	ctctactacg	2520
cccaattca	gcaggaagca	gtagagcgg	tctcggccaa	cctccccaac	agcacttagg	2580
tttctctgtt	gagatgggg					2599

#210> 2 <211> 1326 <212> DNA <213> Homo sapiens <400> 2						
gccgcctggc	actcctgagg	gaagtataaa	ttataacacc	atcttacagc	tagacctctt	60
ctgttagaaaa	ggcaaattgga	gtgaagtgcc	ataagtacaa	actttctttt	cattaagaga	120
caactcacia	ttatgtaaaa	agtggtgattt	atgccctaca	ggaagccttc	agagtctacc	180
tccctatccc	agcatccccg	actccttccc	caactaataa	ggacccccct	tcaacccaaa	240
tggtccaaaa	ggagatagac	aaaagggtaa	acagtgaacc	aaagagtgcc	aatattcccc	300
aattatgacc	cctccaagca	gtgggaggaa	gagaattcgg	cccagccaga	gtgcatgtgc	360
ctttttctct	cccagactta	aagcaaataa	aaacagactt	aggtaaattc	tcagataacc	420
ctgatggcta	tattgatgtt	ttacaagggt	taggacaatt	ctttgatctg	acatggagag	480
atataatgtc	actgctaaat	cagacactaa	ccccaaatga	gagaagtgcc	accataactg	540
cagcctgaga	gtttggcgat	ctctgggtatc	tcagtcaggt	caatgatagg	atgacaacag	600
aggaaagaga	atgattcccc	acaggccagc	aggcagttcc	cagtctagac	cctcattggg	660
acacagaatc	agaacatgga	gattgggtgct	gcagacattt	gctaacttgt	gtgctagaag	720
gactaaggaa	aactaggaag	aagtctatga	attactcaat	gatgtccacc	ataacacagg	780
gaagggaaga	aaatcctact	gcctttctgg	agagactaag	ggaggcattg	aggaagcgtg	840
cctctctgtc	acctgactct	tctgaaggcc	aactaatctt	aaagcgtaag	tttatcactc	900

agtcagctgc agacattaga aaaaaacttc aaaagtctgc cgtaggcccc gagcaaaact	960
tagaaaccct attgaacttg gcaacctcgg ttttttataa tagagatcag gaggagcagg	1020
cggaacagga caaacgggat taaaaaaaaag gccaccgctt tagtcatgac cctcaggcaa	1080
gtggactttg gaggtctctg aaaagggaaa agctgggcaa attgaatgcc taatagggct	1140
tgcttccagt gcggtctaca aggacacttt aaaaaagatt gtccaagtag aagtaagccg	1200
ccccctcgtc catgccccctt atttcaaggg aatcactgga aggcccactg ccccagggga	1260
caaaggtcct ctgagtcaga agccactaac cagatgatcc agcagcagga ctgaggggtgc	1320
ctgggg	1326

<210> 3 <211> 10499 <212> DNA <213> Homo sapiens <400> 3	
ccctggggcg ggcttccttt ctgggatgag ggcaaaacgc ctggagatac agcaattatc	60
ttgcaactga gagacaggac tagctggatt tcctaggccg actaagaatc cctaagccta	120
gctgggaagg tgaccacgtc cacctttaa caccgggctt gcaacttagc tcacacctga	180
gcaatcagag agctcactaa aatgctaatt aggcaaagac aggaggtaaa gaaatagcca	240
gtcatctatt gcctgagagc acagcaggag ggacaacaat cgggatataa acccaggcat	300
cgagctggc aacagcagcc cccctttggg tcccttcctt ttgtatggga gctgttttca	360
tgctatttca ctctattaaa tcttgcaact gcaactcttct ggtccatgtt tcttacggct	420
ggagctgagc ttttgctcac cgtccaccac tgctgtttgc caccaccgca gacctgccgc	480
tgactcccat ccctctggat cctgcagggt gtccgctgtg ctctgatcc agcgaggcgc	540
gcattgccgc tcccaattgg gctaaaggct tgccattgtt cctgcacggc taagtgcctg	600
tggtttgttct aattgagctg aacactagtc actgggttcc atgggttctct tctgtgacct	660
acggcttcta atagaactat aacacttacc acatggccca agattccatt ccttggaatc	720
cgtgaggcca agaactccag gtcagagaat acgaggcttg ccaccatctt ggaagcggcc	780
tgctaccatc ttggaagtgg ttcaccacca tcttgggagc tctgtgagca aggaccccc	840
ggtaacattt tggcaaccac gaacggacat ccaaagtggg gagtaatatt ggaccacttt	900
cacttgctat tctgtcctat ccttccttag aattggagga aaataccggg cacttgctcg	960
ccagttaaaa acgattagtg tggccaccgg acttaagact caggtgtgag gctatctggg	1020
gaagggcttt ctaacaaccc ccaacccttc tgggttgggg acttggtttg cctcaagcca	1080
gcttccactt tcagttttct tggggaagcc gagggccgac tagaggcaga aagctgtcgt	1140
cctgaactcc cggcagtagc cggttgagat catggtgtag ccagaagtct caacagtcgc	1200
ccatgcatgc acccctatct ttccttctga ccatacctc ctgggtccca accacaactt	1260
tcttcaaagt gtagcccaa aattctcctt acctctgaat atacttcctc tgatccctgc	1320

ctcctaggta	ctattggttc	agacttccat	ttcctctagc	aagttgtatc	tccaaaggga	1380
tctaaggaag	ctctgcgctg	cgtccttagg	cacctaggct	ataacccagg	gagtcttatac	1440
cctgggtgtcc	ctcccaattt	aggcatacag	ctcttgacat	gggcagttat	gtaggaccca	1500
ctccccacca	cccttgccag	ggccccaagt	ttgtaaatgg	ctgagggaaa	agagagacag	1560
aggagagaga	gagaaatgga	ggagaaagag	agagagacag	agaggagaga	gagacagtga	1620
gagagacaga	agagagagag	agacaaagag	gagagagaga	gagtcaaaga	gagaaagaaa	1680
gagaaagaaa	tagtaaaaaa	cagtgtgccc	tattccttta	aaagccaggg	taaatttaaa	1740
acctgtactt	gataattgaa	ggtcttctct	gtgaccctat	agcactccaa	tccactttgt	1800
ggtcagtgtg	aataagagca	taggccgaaa	gcactgaggc	cattgacaac	ccgtagcttc	1860
cctatcaaaa	atccttaacc	cagtaacccg	cagatggacc	aatgcattc	agtcggtagc	1920
gcaactgctt	tgctaaaagt	agaaaagtaa	cttttagagg	aaacctcatt	gtgagcacac	1980
ctcacctggt	cagaattatt	ctaataaaaa	aagcaaaaag	gtagcttact	aactcaaaaa	2040
ctttaaaagta	tggggctatt	ctgttagaaa	aaggtaatgt	aactccaacc	actgataatt	2100
cccttaaccc	agcagatttc	ctaacgggat	ttaaattctta	attaccatac	aaaggtccga	2160
ccagacctag	gcggaactcc	cttcaggaca	ggacgataga	tggttcctcc	caggtgattg	2220
aggaaaaaaa	ccacaatggg	tattcagtaa	ttgatacggg	gactcttgtg	gaagcagagt	2280
agaaaaaatt	gcctaataac	tggtctcctc	aaacgtgtga	gctgtttgca	ctcagccaag	2340
cccttaaagta	cttacagaat	caaaagacta	tctcaatcct	gattcaaaaag	gttagctaca	2400
ccctctctgt	aatgcatttg	cataagaact	tgtttatggg	aatgcatctt	gatggggcag	2460
ctggggttggt	ataaaaatagg	aaccagccc	agctctagga	ctcacccctg	agcgcaaagg	2520
caatgttggg	catgctggta	aaggaccact	agaatccagc	agcccagacc	cctttctttg	2580
tgggtcaagaa	aggcgggaaa	aggggtgcag	gactgctaca	tcggtaagca	taactaatcc	2640
gataaacaga	ggtccatggg	tggttacgca	ccctggaaaag	gaactcacc	ctgagcacia	2700
aggcaatggt	gggcacgctg	gtaaaggacc	actagaatcc	agcagcctgg	accctttct	2760
ttgtggtcaa	gagaggcagg	aaaacaggtg	caggactgca	acatcagtga	gcataactaa	2820
ttcgataaagc	agaggtccat	gggtggtgat	gcaccctgga	aagaataagc	attaggacca	2880
tagaggacac	tccaggacta	aagctcatcg	gaaaatgact	agggttgctg	gcacccctat	2940
gttctttttt	cagatgggaa	acgttccccg	caagacaaaa	acgccctaa	gacgtattct	3000
ggagaattgg	gaccaatttg	accctcagac	actaagaaag	aaacgactta	tattcttctg	3060
cagtgccgcc	tggcactcct	gaggaagta	taaattataa	caccatctta	cagctagacc	3120
tctttttag	aaaaggcaaa	tggagtgaag	tgccataagt	acaaactttc	ttttcattaa	3180

gagacaactc	acaattatgt	aaaaagtgtg	atztatgccc	tacaggaagc	cttcagagtc	3240
tacctcccta	tcccagcatc	cccgactcct	tccccaaacta	ataaggaccc	cccttcaacc	3300
caaatggtcc	aaaaggagat	agacaaaagg	gtaaacagtg	aaccaaagag	tgccaatatt	3360
cccccaattat	gacccctcca	agcagtggga	ggaagagaat	tcggcccagc	cagagtgcac	3420
gtgccttttt	ctctcccaga	cttaaagcaa	ataaaaacag	acttaggtaa	attctcagat	3480
aaccctgatg	gctatattga	tgttttacaa	gggttaggac	aattctttga	tctgacatgg	3540
agagatataa	tgtcactgct	aaatcagaca	ctaaccctaa	atgagagaag	tgccaccata	3600
actgcagcct	gagagtttgg	cgatctctgg	tatctcagtc	aggatcaatga	taggatgaca	3660
acagaggaaa	gagaatgatt	ccccacaggc	cagcaggcag	ttcccagtct	agaccctcat	3720
tgggacacag	aatcagaaca	tggagattgg	tgctgcagac	atgtgctaac	ttgtgtgcta	3780
gaaggactaa	ggaaaactag	gaagaagtct	atgaattact	caatgatgtc	caccataaca	3840
gaggggaaggg	aagaaaatcc	tactgccttt	ctggagagac	taagggaggc	attgaggaag	3900
cgctgcctctc	tgtcacctga	ctcttctgaa	ggccaactaa	tcttaaagcg	taagtttatc	3960
ctcagtcag	ctgcagacat	tagaaaaaaa	cttcaaaagt	ctgccgtagg	cccggagcaa	4020
gaacttagaaa	ccctattgaa	cttggcaacc	tcggtttttt	ataatagaga	tcaggaggag	4080
caggcggaac	aggacaaacg	ggattaaaaa	aaaggccacc	gctttagtca	tgaccctcag	4140
caagtggac	tttggaggct	ctggaaaagg	gaaaagctgg	gcaaattgaa	tgccataatag	4200
cgcttgcttc	cagtgcggtc	tacaaggaca	ctttaaaaaa	gattgtccaa	gtagaagtaa	4260
ccgccccct	cgcccatgcc	ccttattttca	agggaaatcac	tggaaggccc	actgccccag	4320
gggacaaaagg	tcctctgagt	cagaagccac	taaccagatg	atccagcagc	aggactgagg	4380
gtgcctgggg	caagcgccat	cccatgccat	caccctcaca	gagccctggg	tatgcttgac	4440
cattgagggc	caggaggttg	tctcctggac	actggtgcgg	tcttcttagt	cttactcttc	4500
tgtcccggac	aactgtcctc	cagatctgtc	actatctgag	ggggtcctaa	gacgggcagt	4560
cactagatac	ttctcccagc	cactaagtta	tgactgggga	gctttattct	tttcacatgc	4620
ttttctaatt	atgcttgaaa	gccccactac	cttggttaggg	agagacattc	tagcaaaagc	4680
agggggccatt	atacacctga	acataggaga	aggaacaccc	gtttgttgtc	ccctgcttga	4740
ggaaggaatt	aatcctgaag	tctgggcaac	agaaggacaa	tatggacgag	caaagaatgc	4800
ccgtcctgtt	caagttaaac	taaaggattc	cacctccttt	ccctaccaa	ggcagtaccc	4860
cctcagaccc	aaggcccaac	aaggactcca	aaagattgtt	aaggacctaa	aagcccaagg	4920
cctagtaaaa	ccatgcagta	accctgcag	tactccaatt	ttaggagtac	agaaacccaa	4980
cagacagtgg	aggttagtgc	aagatctcag	gattatcaat	gaggctgttg	ttcctctata	5040

gccagctgta cctagccctt atactctgct ttcccaaata ccagaggaag cagagtgggt 5100
 tacagtccctg gaccttcagg atgccttctt ctgcatccct gtacatccctg actctcaatt 5160
 cttgttttgcc tttgaagata cttcaaacc ccaatctcaa ctcacctgga ctattttacc 5220
 ccaaggggttc agggatagtc cccatctatt tggccaggca ttagcccaag acttgagcca 5280
 atcctcatac ctggacactt gtccttcggg aggtggatga tttacttttg gccgccatt 5340
 cagaaacctt gtgccatcaa gccacccaag cgtcttcaa tttcctcgt acctgtgggt 5400
 acatgggttc caaaccaaag gctcaactct gctcacagca gggtacttag ggctaaaatt 5460
 atccaaaggc accagggccc tcagtgagga acacatccag cctatactgg cttatcctca 5520
 tcccaaaacc ctaaagcaac taaggggatt ccttggcgta ataggtttct gccgaaaatg 5580
 gattcccagg tatggcgaaa tagccaggtc attaaataca ctaattaagg aaactcagaa 5640
 agccaatacc catttagtaa gatggacaac tgaagtagaa gtggctttcc aggccctaac 5700
 gcaagcccca gtgttaagtt tgccaacagg gcaagacttt tcttcatatg tcacagaaaa 5760
 gacaggaata gctctaggag tccttacaca gatccgaggg atgagcttgc aacctgtggc 5820
 ctacctgact aaggaaattg atgtagtggc aaaggggtga cctcattgtt tacgggtagt 5880
 ggtggcagta gcagtcttag tatctgaagc agttaaaata atacaggga gagatcttac 5940
 tgtgtggaca tctcatgatg tgaatggcat actcactgct aaaggagact tgtggctgtc 6000
 gacaaactgt ttacttaaatt gtcaggctct attacttgaa gggccagtgc tgcgactgtg 6060
 cacttggtgca actcttaacc cagccacatt tcttccagac aatgaagaaa agataaaaca 6120
 caactgtcaa caagtaattt ctcaaaccta tgccactcga ggggaccttt tagaggttcc 6180
 tttgactgat cccgacctca acttgatac tgatggaagt tcctttgtag aaaaaggact 6240
 tcgaaaagtg gggatatgag tggtcagtga taatggaata cttgaaagta atcccctcac 6300
 tccaggaact agtgctcagc tagcagaact aatagccctc acttgggcac tagaattag 6360
 agaagaaaaa agggcaaata tatatacaga ctctaaatat gcttacctag tcctccatgc 6420
 ccatgcagca atatggaaag aaagggaatt cctaacttct gagagaacac ctatcaaaca 6480
 tcaggaagcc attaggaaat tattattggc tgtacagaaa cctaaagagg tggcagtctt 6540
 aactgccgg ggtcatcaga aaggaaagga aagggaata gaagagaact gccaaagcaga 6600
 tattgaagcc aaaagagctg caaggcagga ccctccatta gaaatgctta taaaacaacc 6660
 cctagtatag ggtaatcccc tccgggaaac caagccccag tactcagcag gagaaacaga 6720
 atggggaacc tcacgaggac agttttctcc cctcgggacg gctagccact gaagaaggga 6780
 aaatactttt gcctgcaact atccaatgga aattacttaa aacccttcat caaacctttc 6840
 acttaggcac cgatagcacc catcagatgg ccaaatacatt atttactgga ccaggccttt 6900

ccaaaactat caagcagata gtcagggcct gtgaagtgtg ccagagaaat [aatccccctgc 6960
 cttatcgcca agctccttca ggagaacaaa gaacaggcca ttaccctgga gaagactggc 7020
 aactgatttt acccacaagc ccaaacctca gggatttcag tatctactag tctgggtaga 7080
 tactttcacg ggttgggcag aggccttccc ctgtaggaca gaaaaggccc aagaggtaat 7140
 aaaggcacta gttcatgaaa taattcccag attcggactt ccccgaggct tacagagtga 7200
 caatagccct gctttccagg ccacagtaac ccaggaggta tcccaggcgt taggtatacg 7260
 atatcactta cactgcgcct gaaggccaca gtcctcaggg aaggctcgaga aaatgaatga 7320
 aacactcaaa ggacatctaa aaaagcaaac ccaggaaacc cacctcacat ggccctgctct 7380
 gttgcctata gccttaaaaaa gaatctgcaa ctttcccca aaagcaggac ttagcccata 7440
 cgaaatgctg tatggaaggc ctttcataac caatgacctt gtgcttgacc caagacagcc 7500
 aacttagttg cagacatcac ctcccttagcc aaatatcaac aagttcttaa aacattacaa 7560
 ggaacctatc cctgagaaga gggaaaagaa ctattccacc cttgtgacat ggtattagtc 7620
 aagtccttcc cctctaattc cccatcccta gatacatcct gggaaggacc ctaccagtc 7680
 tttttatcta cccaactgc ggttaaagtg gctggagtgg agtcttgat acatcacact 7740
 agagtcaa at cctggatact gccaaaggaa cctgaaaatc caggagacaa cgctagctat 7800
 tcctgtgaac ctctagagga tttgcgcctg ctcttcaaac aacaaccagg aggaaagtaa 7860
 ctaaaatcat aaatcccat ggccctccct tatcatattt ttctctttac tgttctttta 7920
 ccctctttca ctctcactgc acccctcca tgccgctgta tgaccagtag ctccccttac 7980
 gaagagtttc tatggagaat gcagcgtccc ggaaatattg atgccccatc gtataggagt 8040
 ctttctaagg gaacccccac cttcactgcc cacacccata tgccccgcaa ctgctatcac 8100
 tctgccactc tttgcatgca tgcaaatact cattattgga caggaaaaat gattaatcct 8160
 agttgtcctg gaggacttg agtcactgtc tgttggaactt acttcacca aactggtagt 8220
 tctgatggg gtggagttca agatcaggca agagaaaaac atgtaaaaga agtaatctcc 8280
 caactacccc ggttacatgg cacctctagc ccctacaaag gactagatct ctcaaaacta 8340
 catgaaaccc tccgtaccca tactcgctg gtaagcctat ttaataccac cctcactggg 8400
 ctccatgagg tctcggccca aaaccctact aactggttga tatgcctccc cctgaacttc 8460
 aggccatatg tttcaatccc tgtacctgaa caatggaaca acttcagcac agaaataaac 8520
 accacttccg ttttagtagg acctcttggt tccaatctgg aaataacca tacctcaaac 8580
 ctcacctgtg taaaatttag caatactaca tacacaacca actcccaatg catcaggtgg 8640
 gtaactcctc ccacacaaat agtctgcta ccctcaggaa tattttttgt ctgtgggtacc 8700
 tcagcctatc gttgtttgaa tggctcttca gaatctatgt gcttcctctc attcttagtg 8760

ccccctatga ccatctacac tgaacaagat ttatacagtt atgtcatatc taagccccgc 8820
 aacaaaagag taccattctt tctttttgtt ataggagcag gaggcttagg tgcactaggt 8880
 actggcattg gcggtatcac aacctctact cagttctact acaaactatc tcaagaacta 8940
 aatggggaca tggaacgggt cgccgactcc ctgggtcacct tgcaagatca acttaactcc 9000
 ctagcagcag tagtccttca aaatcgaaga gcttttagact tgctaaccgc tgaaagaggg 9060
 ggaacctgtt tatttttagg ggaagaatgc tgttattatg ttaatcaatc cggaatcgtc 9120
 actgagaaaag ttaaagaaat tcgagatcga atacaacgta gagcagagga gcttcgaaac 9180
 actggaccct ggggcctcct cagccaatgg atgccctgga ttctcccctt cttaggacct 9240
 ctagcagcta taatattgct actcctcttt ggaccctgta tctttaacct ccttggtaac 9300
 tttgtctctt ccagaatcga agctgtaaaa ctacaaatgg agcccaagat gcagtccaag 9360
 actaagatct accgcagacc cctggaccgg cctgctagcc cacgatctga tgttaatgac 9420
 atcaaaggca cccctcctga ggaaatctca gctgcacaac ctctactacg cccaattca 9480
 gcaggaagca gttagagcgg tctcgcccaa cctccccaac agcacttagg ttttctgtt 9540
 gagatggggg actgagagac aggactagct ggatttccta ggctgactaa gaatccctaa 9600
 ccctagctgg gaaggtgacc acatccacct ttaaacacgg ggcttgcaac ttagctcaca 9660
 cctgaccaat cagagagctc actaaaatgc taattaggca aagacaggag gtaaagaaat 9720
 agccaatcat ctattgcctg agagcacagc aggagggaca atgatcgga tataaaccaca 9780
 agtcttcgag ccggcaacgg caaccccctt tgggtcccct ccctttgtat gggagctctg 9840
 ttttcatgct atttcactct attaaatctt gcaactgcac tcttctggtc catgtttctt 9900
 acggcttgag ctgagctttc gctcgccatc caccactgct gtttgccgcc accgcagacc 9960
 cgccgctgac tcccatccct ctggatcatg cagggtgtcc gctgtgctcc tgatccagcg 10020
 aggcacccat tgccgctccc aatcgggcta aaggcttgcc attgttcttg catggctaag 10080
 tgccctgggtt catcctaatt gagctgaaca ctagtcaactg ggttccatgg ttctcttctg 10140
 tgaccacag cttctaatag agctataaca ctaccgcat ggccaagggt tccattcctt 10200
 gaatccataa ggccaagaac ccaggtcag agaacacgag gcttgccacc atcttgaggag 10260
 ctctgtgagc aaggaccccc aagtaacaca accatgaggg tgcaaagca tgggccacta 10320
 atggtagagc aagaaaacag aagggccctg gttcctcgaa ggcatcagtg agctgaaatg 10380
 cctgccctgg atgtcctatt cctaggtgtt tttctgcctg aagcagatta aaccctttgt 10440
 tcacttctcc aagtaggggt tctattacag cccaaatcaa tccccacccc agatgacat 10499

<210> 4 <211> 2784 <212> DNA <213> Homo sapiens <400> 4
 ctccttcagg agaacaaaga acaggccact acccaagaga agactggcaa ctagatttta 60

cccatatgcc	caaatctcag	ggatttcagt	atctactagt	ttgggtagat	actttcactg	120
gttgggcaga	ggccttcccc	tgtaggacag	aaaaggccca	agaggtaata	aacgttcatg	180
aaataattcc	cagattcgga	cttccccaa	gcttacagag	tgacaatggc	cctgctttca	240
aggctacagt	aaccaagga	gtatcccagg	tgttaggtat	acaatatcac	tcacactgcy	300
cctggaggcc	acagtcctca	ggaaagggtg	agaaaatgaa	caaaacactc	aatgacatc	360
taaaaaagct	aatccaggaa	accacacctg	catggcctgc	tctgttgctt	atagccttac	420
taagaatccg	aaactctccc	caaaaagcag	gacttagtcc	atacaaatg	ctgtatggac	480
ggcccttcct	aaccaatgaa	cttgggcttg	accgagagac	agccaactta	gttgcagaca	540
tcattctcctt	agccaaatat	caacagggtc	ttaaaacatt	acaggggagcc	tgtccccaa	600
aagagggaaa	ggaactattc	caccctgggtg	acatggtatt	agtcaagtcc	cttccctcta	660
attccccatc	cctagatata	tcttggaag	gaaactaccc	agccatttta	tctaccctaa	720
cggcagttaa	agtggctgga	gcggagtctt	ggatacatca	cactcaagtc	aaaccctgga	780
actgccaaa	ggaactcaaa	aatccatgag	acaatgctag	ctattcctgt	gaacctctag	840
gggatctgcy	cctgctcttc	aatgacaac	cagggggaaa	gtaactaaaa	tcgtaaatcc	900
cctggccctc	ccttatcata	tttttctctt	tactgttctc	ttacccctt	tcactctcac	960
tgacccccgt	ccatgccact	gcaccccgtc	catgccccgt	ccatgccagt	agctcccctt	1020
agcaagagtt	tctatggaga	atgcagcgtc	ccggaaatat	tgatgcccc	ttgtatagga	1080
gttttatctaa	gggaaccccc	accttcaactg	cccacacca	tatgcccac	aactgctata	1140
ctctgccac	tctttgcatg	catgcaaata	ctcattattg	gacaggaaaa	acgattaatc	1200
ccagttgtcc	tggaggactt	ggaggactca	cttcaactcat	accagtatgt	ctgatggggg	1260
tggagttcaa	gatcaggcaa	cagaaaaaca	cataaaggaa	gtaatctccc	aactgacctg	1320
ggtacatagc	acccttgccc	cctacaaagg	actagatctc	tcaaaactac	atgaaacctt	1380
ccatacccat	actggcctgg	taagcctatt	taataccacc	ctgactgggc	tccatgaggt	1440
ctcgcccaa	aaccctacta	actgttggat	gtgcctcccc	ctgcacttta	ggccatacat	1500
ttcaatccct	atacctgaac	aatggaacaa	cttcagcaca	gaaataaaca	ccacttctgt	1560
tttagtaggt	cctctttcca	atctggaaat	aaccataacc	tcaaacctca	cctgtgtaaa	1620
atttagcaat	actatagaca	cagccaactc	ccaatgcac	aggtgggtaa	ctcctcccac	1680
acgaatagtc	tgccctaccct	caggaatatt	ttttgtctgt	ggtacctcag	cctatcattg	1740
tttgaatggc	tcttcagaat	ctgtgtgctt	cctctcattc	ttagtggccc	ctatgcccac	1800
ctacactgaa	caagatttat	acaatcatgt	catacctaag	ccccgcaaca	aaagagtacc	1860
cattcttctt	tttgttattg	gagcaggagt	gctaggcgga	gtagctactg	gcattggcgg	1920

tatcacaacc	tctactcagt	tctactacaa	actgtctcaa	gaactaaatg	gtgacatgga	1980
atgggctcgt	gataccctgg	tcaccttgca	agatcaactt	aactccctag	cagcagtagt	2040
ccttcaaaat	cgaagagctt	tagacttgct	aaccgcggaa	agcgggggaa	cctttttatt	2100
tttagaggaa	aaatgctgtt	gttatgttaa	tcaatccgga	atcatcaccg	agaaagttaa	2160
agaaattcaa	ggtcgaatat	aacgtagagc	aaaggagctg	caaaacactg	gaccctgggg	2220
cctcctcagc	caatggatgc	cctggattct	ccccttctta	ggacctctag	cagctataat	2280
attgttactc	ctctttggac	cctgtatctt	taacctcctt	gttaagtttg	tcttttccag	2340
aatcgaagca	gtaaaactac	aaatcgttct	tcaaattggag	ccccagatgc	agtccatgag	2400
taaaatctac	cacggacccc	tggaccggcc	tgctagccca	tgctctgatg	ttaatgacat	2460
caaaggcacc	cctcccagg	aaatctcaac	tgacacacct	ctactacgcc	ccaattcagc	2520
aggaagcagt	tagagtgggt	gttggccaac	ctccccaaca	gcagttgggt	tttctgttg	2580
agagggggga	ctgagagaca	ggaataacta	gatttcctag	accaactaag	aatccctaag	2640
cttagctggg	aaggtgaccg	cttccacctt	taaacaccgg	gcttgcaact	tagctcacgc	2700
caaccaatc	agatactaaa	gagagctcac	taaaatgcta	attaggcaaa	aacaggagat	2760
aaagaaatag	ccaatcatct	gttg				2784

K210> 5 <211> 1799 <212> DNA <213> Homo sapiens <400> 5						
gggattctta	gtcggcctag	gaaatccagc	taatcctgtc	tctcagtcct	cccactcaac	60
aggaaaaccc	aagtgtgtgt	ggggagggtg	gctgacgacc	agtctaactg	cttctgtcgg	120
gattggggca	tagtaggggt	tgtgcagttg	agatttcctc	gggaggggtg	cgttcgatat	180
cattacaatt	ggagcatggg	ctagtaggcc	gggccagggg	tccacggtag	atcttagtca	240
tggacttcat	ctgggggttc	atttgaagaa	cgatttgtag	ctttacaact	ttgattctgg	300
aagagacaaa	cttaacaagg	aggttaaaga	tacagggtcc	aaagaggagt	atcaatatta	360
gagctgctag	agatccctaag	aaggggagaa	tccagggcac	ccattggctg	aggaggcccc	420
agggctctgg	gtttttgaag	ctcctctgtt	ctacgttgta	ttcaatctcg	aattttcttca	480
actttctctg	tgacaattca	ggattgatta	acataataac	aacattcttc	cgctaaaata	540
acataataac	aacattcttc	ccctaaaaat	aaacagcttc	cccctctttc	agaggtttagc	600
aagtctaaag	ctcttcaatt	ttgaaggact	actgatgcta	ggaagttaag	ttgatcttgc	660
aaggtgacca	gggagtcggc	aaccatttcc	atgtcaccat	tgagttcttg	agatagtttg	720
tagtagaact	gagtagaggt	tgtggtagcc	ccaatgccag	aacctagtcc	acctagcact	780
cctgctccga	taacaaaagg	aagaatgagt	actcttttgt	tgtggggctt	aggtacaaca	840
taattgtata	aatcttggtc	agtgtaaatg	gtcatggggg	cactaagaat	gagaggaagc	900

acatagattc tgaagagcca ttcaaacaac gataggctaa ggtaccacag acaaaaaata	960
ttcctgaggg taggcagact attcgtgtgg gaggagttac ccacctgatg cattgggagt	1020
tggttgtgtc tacagtattg ctaaatttta cacaggtgag gtttgaggta tgggttattt	1080
ccagattgga aacaagaggt cctactaaaa cggaagtggg gtttatttct gtgctgtagt	1140
tgttccattg ttcaggtaca gggattgaaa tgcattggcct gaaatacagg gggaggcaca	1200
accaacagtt agtagggttt tggaccgaga cctcatggag ccagtgagg gtggtattaa	1260
ataggcttac caggcaagta tgggtatgga gggtttcatg tagttttaag agatctagtc	1320
ctttgtaggg gctaggggtg ctatgtaccc gggtcagttg ggaggttact tcctttacat	1380
gtttttctct tgcctgatct tgaactccac cccctcaga cataccagta tgggtgaagt	1440
aagtccgaca gacagtggct ccaagtcttc caggacaact aggattaatc attttccctg	1500
tccaataatg agtatttgca tgcattgcaa gagtggcaga gttatagcag ttgtggggca	1560
atgggtgtg ggcagtgaag gtggagtttc ctttaggtaa actcctattt gatggggcat	1620
caatatttct gggaagccgc attcttcata gaaactcttg gtaaggggag ctgctggttg	1680
acagcagca tggagggggg gcagtgagag tgaaaggggg taagagaaca gtaaagagaa	1740
caatatgata agggagggcc atggggattt acgattttag ttactttcct cacggttgt	1799
#<210> 6 <211> 1489 <212> DNA <213> Homo sapiens <400> 6	
gggtgcttgc cccgggcact ctacgtcctg ctgctggatc atctggttag tggcttctga	60
ctcagaggac ctacgtcccc tggggcagtg ggccttacag tgattccctt gacacgaggt	120
catggacga gggggcggct tatttctatt tggacaatct tttttaagt gtccttgtag	180
accgcactgg aagcaaacc tattagcat ttgatttgcc tagcttttcc cttttccagt	240
gcctccaaag tccgcttgcc tgagggccat gactaaagcg gtggcctttt ttttatccca	300
tttgtcccat tctgcctgct catcctgac tctattataa aaaactgagg ttgccaaagt	360
caataggggt tctaagtttt gttccgggcc taaggcagac ttttgaagt ttttccta	420
gtctgtagct gactgagtga taaacttata ctttaagatt agttggcctt cagtagagtc	480
agttgacaga gagaggtatg cttcctcaat gcctccgtta gtcactccag aaaggcggta	540
ggattttctt cctttccctg tgttatagt gacatcattg aataactcac aggcttcttt	600
ctagttttcc ttagtccttc tagcacgcaa gttagcaaat gtctgcggca ccaatctcca	660
tgttctgatt ctgtgtccca gtgaggtctt aactgggaa ctgcctgctg gcctgtgggg	720
aatcgttctc tttcctctgt tgtcgaccta tcattgacct gactgagata ccagagatcg	780
ccaaactctc aggctgcagt tacggcgaca cttctgtcat ttggggttag tgtctgattt	840
agcagtaaca ttatatctct ccatatcaga tcaaaggatt gtcctaaacc ttgtaaaaca	900

ccaatatagc cattaggggtt atctgagaat ttacctaggt ctattttaat ttaaagtctg	960
ggagagaaaa aggcacatgc actctggctg ggccgaattc tcttcctccc actgcgtctg	1020
agagagaaaa aggtacgtgc actctggctg ggccgaattc tcctcccacc gcttggaggg	1080
ggcataatcg gggaatattg gcattctttg gttagttggt tacccttttg tctatctcct	1140
tttggaccgt ttgggttgaa ggggggtcct tattatttgg ggaaggagtc tgggggatgc	1200
tggggtaggg aggtagactc tgagggtctc ctgtagggca taaatcacac tttttacata	1260
attgcgagtt gtctcttaat gaaaagaaag tttgtacgta tgacacttca caccatttgc	1320
cttcttttct acaaaagagg tctagctgta agatgggtgtt ataatttatg cttccctcag	1380
gatgccaggt ttctccccct taaagagtat atcgttgccg ggcggtactg cagaagaata	1440
tgtctttttt ttcttagcat ctgagagtca aattgggtccc aattctcca	1489

210> 7 <211> 1216 <212> DNA <213> Homo sapiens <400> 7

aaaagataca gggattgaaa tgtatggcct gaagtgcagg gtcatatagg tgtgggtggt	60
gaaaatgggg tttccttttag aaaaactcct atacgatggg tcatcaatat ttccaggaag	120
cgcattctc catagaagct cttggtaatg ggagctactg gtagtacagt ggcatggagg	180
gggtgcagtg agagtgaag agggtaaaag aacagtaaag agaaaaatat gataagggag	240
gggttcagtg agagtgaag ggggtaagag aacagtaaag aaaaaatat gacaaggagg	300
gcatgagga tctacgattc tagttacttt cctcacggtt gtcgcttgaa gagcagggtgc	360
agatcctcta gaggttcaca ggaatagcta gcgttgtctc ctggattttc gggttccttt	420
ggcagtatac agagtttgac tcgagtgtga tgtattcaag actccactcc agccacttta	480
accgcagttg gggtagataa aatgactggg tagggtcctt cccaggatgt atctaaggat	540
ggggacttag aaggaaggga cttgactaat accatgtcac cagggtgcaa taattacttt	600
ccctcttctc gggaacaggt tccctgtaat gttttaagaa cttgttgata tttggccaag	660
gaggtgatgt ctgcaactaa gctggccatc tctcgggtcaa gcacaaggtc cttgggttagg	720
aagggccatc catacagcat tttgtatggg ctaagtccctg ctttttgggg agagttttgg	780
attcttagta aggtcttagg caacagagca ggccatgcaa ggtgggtttc ttgggttagc	840
ttttttaaat gtcgtttgag tgcttcattc attttcttga cttttcctga ggattgtggc	900
ctccacgcgc agtghtaagt atattgtatg cctaatgcct gggatactcc ctgggttact	960
gtagccttga aaacggggcc attgtcactc tgtaagcctc ggggaagtcc gaatctggga	1020
attatttcat gaattagtgc ctttattaca tcttggtcct tttctgtcct acaaaggaag	1080
gcctctgccc aaccagtga aatatctacc cagactagta gatactgaaa tccctgagat	1140
ttgggcatgt gggtaaaatc tagttgccag tcttctcctg agtaatggcc tgttctttgt	1200

tctcctgaag gagctt 1216

<210> 8 <211> 976 <212> DNA <213> Homo sapiens <400> 8
 agtgataatg gaataacttga aagtaatccc ctcaactccag gaactagtgc tgagctggcc 60
 aaactaatag ccctcactcg ggcactagaa ttaggagaag agaaaagggt aaatatatat 120
 acagactata agtatgctta cctagtcctt catgcccattg cagcaatatg gagagaaagg 180
 gaattcctaa cttccaaagg aacacctatc aaacatcagg aagccattag gatattatta 240
 ttggtggtac agaaacctaa agaggtggca gtcctacact gctgggggtca tcagaaaaaa 300
 aaggaaaggg aaatagaagg gaactaccaa gcagatattg aagccaaaag agccgcaagg 360
 caggaccctc cattagaaat gcttatagaa ggacccttag tgtggggtaa cccctccag 420
 gaaagcaatc ccagtactc agcaggagaa ataaaatgga gaacctcacg aggacatact 480
 ttctccctc caggatggct agccaccaa gaaggaaaaa tgcttttgcc tgcagctaac 540
 caatggaaat tacttaaaac cttcaccaa acctttcact taggattgat agcaccatc 600
 agatggccaa attattattt actggatcag gccttttcaa aactatcaag caggtagtca 660
 gggcctgtaa agtgtgcaa agaaataatc tcctgcactg caagccatac atttcaatcc 720
 ctgtatcttt aacctccttg ttaagtttgt ctcttcaga atcaaagctg taaaactaca 780
 atggttctt caaatggagt ctcatatgca gtccatgact aagatatacc gcagccccct 840
 ggagggggcc tgctagccca tgctccaatg ttaatgacat cgaaggcacc cctcccgagg 900
 aatctcaac tgcacaacc ctactatgtc ccaattcagc aggaagcagt taaagcggtc 960
 tcggccaac ctcccc 976

<210> 9 <211> 942 <212> DNA <213> Homo sapiens <400> 9
 agaggagaac agcagcataa gcggctggca gaggtaggga aagaccagca agaagaaaag 60
 agagaaagag aaagagaaaag tcagagaaaag agacagagag aggaagagac aaagagacag 120
 aaagtcaaag aggtagtagt cagaaacaga gacaaaaaaa aggagtcaga aagagggaca 180
 gacacagaaa gtcaaaaaaa aagttaagaa gaaaggaaaa gacaaagaag aagtcgaaga 240
 ggagaaagag agagatagaa gtagtaaaga aaaaaacagc atatccatt cttttaaagc 300
 cagggtaaat ttctatctac ccagccaagg catattctac ttatgtggat cttcaaccca 360
 tatctgcctc tcagacagtt tgcaagaaat aatgaaatct atccttactt tacaatccca 420
 aatagactct ttggcagcag tgactctcca aaactgcaga ggcttagacc tcctcactgc 480
 tgaaaaagga ggacactaca ctttcttagg ggaagaatgt tgtttttaca ctaaccagtc 540
 ggggatagta tgagatgctg cccggagttt acaggaaaag gcttctgaaa tcagacaacg 600
 cttttcaaat tcttatacca acttctggag ttaggcaaca tggcttctcc cttttctagg 660

ccctgtggca gccatcttgc tgttactcgc ctttgggccc tgtattttta accttcttgt	720
caaatttggt tcctctagaa tcgaggccat caagctacag atggtcttac aaatggaacc	780
ccaaaagagt tcaactaaca acttctaccg aggacccctg gatcaacca ctggcacttc	840
ccctggccta gagagttccc ctctgaagga caccgcaact gcagggccct tctttgcccc	900
atccagcagg agtagctaga gtgggtcatcg gccaaattgc ca	942

<210> 10 <211> 1375 <212> DNA <213> Homo sapiens <400> 10	60
ccccaatatt ctctttctga tggggaaaaa tggccacctg agggaagcac aaattacaat	
actatcctgc agcttgatct tttctgtaag agggaaggca aatggagtga aataccttat	120
gtccaagctt tcttttcatt gagggagaat acacaactat gcaaagcttg caatttacct	180
cccacaggag gacccctcag cttaccccca taccctagcc tccctatagc ttcccttcct	240
attgatgata ctccctctct aatctcccct gcccagaagg aaataagcaa agaaatctcc	300
gaagggtccac aaaaaccccc gggctatcgg ttatgtcccc ttcaagctgt agggggagg	360
gaatttggtc caaccgggt gcatgtcccc ttctccctct ctgatttaaa gcagatcagg	420
gagacctggg gaagttttca gatgatcctg ataggtagat agatgtccta cagggtctag	480
ggcaaacctt tgacctcact tggagagacg tcatgtctact gttagatcaa accctggcct	540
ttaatgaaaa gaatgcggct ttagctgcag cctgagagtt tggagatacc tgggtatccta	600
gtcaagtaaa tgaaagaatg acagccgaag aaagggacaa cttccctact ggtagcaag	660
ccatccccag tatggatccc cactgggact ttgactcaga tcatggggac tggagtcgta	720
acatctgtt gatctgtgtt ctggaaggac taaggagaat tgggaaaaag cccatgaatt	780
tattcaatgat atccaccata acccaggga aggaagaaaa tccttctgcc ttccctcgagc	840
ggctacaaga ggccttaaga aaatatactc ccctgtcacc cgaatcactc gaggggtcaat	900
tgattctaaa agataagttt attacccaat cagccacaga tatcaggaga aagctccaaa	960
agcaagccct gagccctgaa caaaatctag agacattatt aaacctggca accttgggtgt	1020
tctataatag ggaccaagag gaacaggccc aaaaggaaaa gcgagatcag agaaaggccg	1080
cagccttagt catggccctc agacaaacaa accttgggtg tttagagagg tcagaaaatg	1140
gagcaggcca atcacctggt acggcttggt atcagtgcgg ttactagga cactttaaaa	1200
aagattgtcc aataagaaac aagctgcccc ctcatccgtg tccactatgc cgaggcaatc	1260
actggaaggt gcactgcccc agaggatgaa ggttccctgg gttagaagcc cccaaccaga	1320
tgatccaaca acaggactga gggtgcccgg ggcaagcacc agctcatgtc atcac	1375

<210> 11 <211> 944 <212> DNA <213> Homo sapiens <400> 11	60
acctaggagg aactgtcttc aggacaggac tatagatgct tcctcccagg cgattaagg	

daaaagacac aatgggtatt cagtaagtga taaggaaact cttgtagaag cagagttagg	120
aaaattgcct aataattggt ctgctcaaat gtgcgagctg tttgactca gccaaacctt	180
aaaagtatta cagaatcagg aagaagccat ctataccaat tctaagttaa tatggactga	240
acgagaactt attaatagca aagaataatt gaaatcccaa acttacaagg ttttcaacaa	300
aagcacagtt tgctaaaagt taactgtgta acatgtatta tcctactacc acaaactctc	360
aatgatttc tcagacagtt tgcaagaaac aatgaaacct atccttactc tacaatccca	420
aatagactct ttggcagcag tgactctcca aaaccaccaa ggcctagacc tcctcactgc	480
tgagaaagga ggactctgca ctttcttagg ggaagattgt tgtttttaca ctaaccagtc	540
agggatagtg tgagatgcca cccagcgttt acaggaaaag gcttctgaaa tcagacacaa	600
tgcttttcaa accttatagc aacctctgga gttcggcgac tggcttttcc cctttctagg	660
tcctgtgaca gccatcttgc tattactcgc cttcgggccc tgtattttta acctcctcgt	720
gaaatttggt tcctctagga tcgaggccat caagctacag atgggtcttac aaatggaacc	780
gcaaattgagc tcgactaaca acttctactg aggaccctg gaccgacca ctggcccttt	840
actggctta aagagtttcc ctctggagga cactacaact gcagggcccc ttctttgccc	900
gatccacagg aagttagcta gagcagtcac cacccaattc ccaa	944

210> 12 <211> 963 <212> DNA <213> Homo sapiens <400> 12

acaggaacc ccataatacg tccttggcaa attctattca gctccaactg ctaggagtgg	60
ccatttgtc ctgaaccctc aaatcatggg aatgagaaat gaatttagac tgaccacagc	120
cttatgagt tttcagctac aggggtgtat agaaccctga taaggagtgt tctttgtgtg	180
tggaagatcc ttctatatatt gcctccccac caactggaca ggaacttgta ctttagccta	240
catagtacct cctgtgactt atccttttca gaagaggcag tagctgtgcc cattcatgct	300
aagcttcagc cgagagcaat ctactactt cctctatttg ctggttttagg atttactacc	360
acctaggaag tggactcaca gcctagatga aatctctctc caacttactc aaatccagga	420
ccaaatagac tcattagcag ctgtggttct ccgaaccagt gagcactaga tctccaatct	480
cctcactgcc gaaaggggag gaacatgcct ttttctgaac aaggaaatgtt gtttttatgt	540
caataaatca ggcatagtga gagatggaat taaatgactt caggatagag ctagcagact	600
acatggtggg acaaccgaaa ctacctcagg gttctcacag cctgttctcc actggcttct	660
tccattttta ggtcccttcc ttatgattat tctaggagta acctttggcc catgtctttt	720
cagttccttc atcctttcgt ttcttcctga atagaatcaa tgaaactaga aatgttactg	780
cagatggaac ctgagatgac ttcaaccagc acctattatc aaggaccct aaaccagcct	840
gccggcccat acccgacgt tgacacccaa accacctctc acgaggaaac ctgagctaca	900

gaaccccttc tatgcccta ttcagcagga agcaattaga gtggatcatcc tcccacaccc	960
caa	963
<210> 13 <211> 1362 <212> DNA <213> Homo sapiens <400> 13	60
ccacaatatc ctcttcagg aggagaacga tggccacctg aggggaagtat acactataat	
accatcctgc aactagatct gttttgtaaa caagaaggca agtggattta ggtaccatat	120
gttcagacct ttttctcatt aagggatgat aaccacgat tgtgtaagac atgtaacctg	180
cacccacag ggagtcctca aattctaccc ccatacccag tcctccccac ggctcctcct	240
actaatgcca aaccctctct ggcttctaca gcccaaaagg gaacaaataa aagagccttc	300
agagagccaa gagacccac tggcccctgg ctatgtcctc ttcaggctgt aggaggggaa	360
tttggcccaa cccgagtaca tgttcccttt tctctctctg atctaaagca aattaaggca	420
gacttggatg aaagtctca gatgaccca atagatacgt agatggcctg ctgggtcttg	480
gacaatcttt tgaccttcc tggagagaga tcatgttatt gcttgatcag acctaacctc	540
gaatgagaag aatgctgctt taacaggagc ccgagagttt ggggatacct ggtacctcag	600
gtaagtaagt gatagaatga catcagaaga gagcagtttc ctactggcca gcaagcagtc	660
ccagtatgg atccccactg ggacctgac tcggatcatg gggactggag tcacaaacat	720
ttactgacct gtatcctaga agggttaagg agaactagga aaaagcccat gaactattca	780
atgatgtcta ctataacca agggaaggaa gaaaacccta ttgccttcct caaaaggctg	840
tagggaggctt tgagaaaata tactcccctg tcaccagatt cctcgaagg ccagttaatt	900
gtaaaggaca aatttattac tcagtcagct gcagacatta ggaaaaagct ccaaaagtta	960
tgcccttgggcc gagcaaaatt tggaggcatc attaaacctg gcaacctcag tgttctatca	1020
tagggacca gaggaacagg ccgaaaagga aaagcaggat aagagaaagg ctgcagattt	1080
agtcatgccc tcagacaaac cttggcggtt caaagaggag aaaaaatgga gcaggccaat	1140
caccagcag ggcttattat cagtgcagtt tacaaggaca ctttaaaca gattgtccaa	1200
agagaaataa gccgccctct caccatgtc cactatgcca agtgatcac tggaaggcac	1260
actgtcccag aggacaaagg ttctctgggc cagaagtccc caaccagatg atccagcaac	1320
aggatggagg gtgcccgggg caagcaccag ctcggtgtgt ca	1362
<210> 14 <211> 945 <212> DNA <213> Homo sapiens <400> 14	60
ttgcagatca atctcagact gctgtgctag caatgagtga ggcttcgtgg gcatgggacc	
ctctgagcca ggcattggat ataatgtcct tgtgtgccat ttgctaagac tgttggaata	120
gcacagtatt aggggtgggag tggcccgatt ttccagggtgc tgtctgtcac cgcttccctt	180
ggctaggaaa gagaattccc tgacctcttg ttcttcccag gtaaggcagt gcctcacctc	240

gcttcagctc acactcaggt gactgcaccc actgtcctgc cccactgtc ggacaagccc	300
cagtgagatg aacctggtac ctacagttgga aatgcagaaa tcacctgtct tctgcgtcac	360
tcacactggg agctgtagac tggagctggt cctatttggc catcttggaa ccatctccca	420
aatagactct ttggcagcag tgactctcca aaaccaccaa ggcctagacc tcctcattgc	480
tgagaaagga ggactctgca ccttcttagg ggaggagtgt tgtttttata ctgaccagtc	540
agggatggta cgagatgcca cccgatgttt acaggaaaag gcttctgaaa tcacacaaca	600
cctttcaaac tcttatacca acctctggag ttgggcaaca tggcttctcc cctttctcgg	660
tcccattgca gccatcttgc tattactcgc cttcaggctg tgtattttta acctccttgt	720
caaatttggt tcctctagaa ttgaggccgt caagctacag atggtcttac aaatgggacc	780
ccaaatgagc tcaactaaca acttctgcca aggaccctg gaccaacctg ctggcccttt	840
cactggcctt aagagttccc ctctggaggg cactacaact gcagggccccc ttctttgccc	900
ctatccagca ggaagtagct agagcagtc taccaccaatt cccaa	945

CTGAGCTACCT TGGCAAGTAC TCTAGGAGTA TGGGAAAATG AAAACAACAA ACTCACACAC

<210> 15 <211> 939 <212> DNA <213> Homo sapiens <400> 15	
gagagctacct tggcaagtac tctaggagta tgggaaaatg aaaacaacaa actcacacac	60
atattttaaca tacacaatca ggtctgcccc cccagcaagg tatattcttt gtatgtggaa	120
catcgaccta tatctgcctc cccactaact agacagccac ctgaatctta gtctttctaa	180
gtcccaacag taacattgcc ccaggaaatc agaccatata agtatccctc aaagctcaag	240
tctgtcagtg cagagccata caactaatac cctacttat agggtaagga atggctactg	300
ctacaggaac cagaatagct agtttgttta cttcattatc ctactaccac acactctcaa	360
atgatttctc agacagtttg caagaaataa cgaaatctat ccttactcta caatccccaa	420
tagactcctt ggcagcagtg accctccaaa acggctgagg cctagacctc ctactgcca	480
agaaaggagg actctgcatt ttcttagggg aagagtgttt ttactactaac cagtcaggga	540
cagtatgaga tgccactcgg agtttacagg aaaaggcttc tgaagtcaga caatgccttt	600
caaactctat accaaactct ggagttgggc aacatggctt ctcccctttc taggtcccgt	660
gacagccatc ttgctattat ttgcctttga gccctgtatt tttaatctcc ttttcaaatt	720
tgtttcctct ggatcgaggc catcgagcta cagatggctc tcacaaatgg aacccccaaat	780
gagctcaact aacaacttct actgaggacc cctggactaa cctgctgacc ctttactgg	840
cctgaagaat tcccctctgg aggacactac aactgcaggg ctcttctttt gccctatcc	900
agcaggaagt agctagagct gtcattgcct aattcctaa	939

<210> 16 <211> 979 <212> DNA <213> Homo sapiens <400> 16	
agtgataatg gaatacttga aagtaatccc ctactcccc aggaactagt gctcagctgg	60

cagaactaat	agccctcact	cgggtactag	aatcaggaga	aggaaaaagg	gtaaatatat	120
atacagactc	taagtgtgct	tacctagtcc	tccatgccca	tgcagcaata	tggagagaaa	180
gggaattcct	aacttccgag	ggaacaccta	tcaaacatca	ggaagccatt	aggaaattat	240
tatttggtgt	acagaaacct	aaagagggtg	cagttttaca	ctgccggggg	catcagaaa	300
gaaaggaaa	ggaaatacaa	gggagccacc	aagttgatat	tgaagtcaaa	agagccacaa	360
ggctggaccc	tccattagaa	atgcttatag	gaggaccctt	agtatggggg	aatcccctcc	420
gggaagccaa	gccccagtac	tcagcaggag	aaatagaata	gggaacttca	tgaggacata	480
cttccctccc	ctccagatgg	ctagccacca	ataaaggaaa	aatacttttg	cctgcagcta	540
accaatagaa	attacttaaa	acccttcata	aaaccttcca	cttaggcatt	gatagcacc	600
atgagatggc	caaattatta	tttactggac	caggcctttt	caaaactata	aagcagatag	660
tcagggcctg	taaagtctgc	caaagaaata	atcccctgca	ctgcaggcca	tacatttcaa	720
ccctgtatc	tttaacctcc	ttcttaaatt	tgtctcttcc	agaatcaaag	ctgtaaaatt	780
acaaatagtt	cttcaaattg	agccacagat	gcagtccatg	actaagatcc	accacagacc	840
cctggaccag	cctgctagcc	catgctccaa	tgттаatgac	atcgaaggca	ccccctctg	900
gggaaatctc	aactgcacaa	cccctactac	gccccaattc	agcagaaagc	agtttagagt	960
gtcatcagcc	aacctcccc					979

210	17	<211>	1774	<212>	DNA	<213>	Homo sapiens	<400>	17	
catgctggta	aaggaccgct	agaatccagc	agccaggacc	actttctttg	tgggtcaagaa		60			
aggtgggaaa	acaggtgcag	gactgctaca	ctggtaagca	taactaatcc	gataagcaga		120			
tggtccatggg	tggttacgca	ccctggaaag	gaataagcat	taggactata	gaggacactc		180			
taggactaat	gctcatcgga	aatgactag	gggtactggc	atccctatgt	tcttttttca		240			
gatgggaaat	gttcccccca	aggcagaaat	gccoctaaga	tgtattctgg	agaaatggga		300			
ccaatctgac	catcagacac	taagaaagaa	atgacttata	ttcttctgca	gtaccacctg		360			
gccacaatat	cttcttcaag	gggcagaaac	ctggcctcct	gaggggaagta	taaattataa		420			
caccatctta	cagctagacc	tcttttgtag	aaaagaaggc	aatggagtg	aagtgccata		480			
tgtacaaaact	ttcttttcat	taagagataa	ctcccaatta	tgtaaaaagt	gtgatttatg		540			
ccctacagga	agccctcaga	gtctacctcc	cgaccccagc	aagacccea	ctccttctcc		600			
aactaataag	gacccccctt	caacccaaat	ggtccaaaag	gagatagaca	aaggggtaaa		660			
caatgaacca	aagagtgcc	atattacacg	attatactcg	ctccaagcag	tgggaggaga		720			
atttggccca	gccagcgtgc	atgtaccttt	ttctctctca	gatttaaagc	aaattaaaat		780			
agacctaggt	aaattctcag	ataaccctga	tggctatatt	gatgttttac	aagggttagg		840			

ācaatccttt gatctgacat ggagagatat aatgttactg ctaaatacaga cactaacc	900
aatgaaaaa agtgctgcca taacagcagc ctgagagttt ggcgaactct ggtatctcag	960
tcagggtcaat gataggatga caacagatga aagagaatga ttccccacag gccagcaggc	1020
agttcccagt gtagaccctc attaggacac agaatacagaa cttggagatt ggtgccacag	1080
acatttgcta acttgctgct tagaaggact aaggaaaact aggaagaagc ccatgaatta	1140
ttcaatgatg tcccctataa cacagggaaa ggaagaaaat cctactgcct ttctggagag	1200
actaaggga ggaattgagga agcatacctc cctgtcacct gactctatta aaggccaact	1260
aatcttaaag gataagtta tcaactcagtc agctgcagag attaagaaaa aacttcaaaa	1320
gtatgcctta ggcccagagc aaaacttaga aaccctactg aacttgcaa cctcagtttt	1380
ttataataga gatcaggaag agcaggggaa tgggacaaat gggataaaaa aaaaaaaaaa	1440
aggtgactgc tttagtcgtg gccctcaggc aaatggactt tggaggctcc agaaaaggga	1500
gaagctgagc aaattgaatg cctaacaggg cttgcttcta gtgtggtcta caaggacact	1560
ctaaaaaga ttgtccaagt agaaacaagc tgcccccttg tccatgcccc ttatgtcaag	1620
ggaatcactg gaaggccac tgccccagga gatgaaggtc ctctgagtca gaagccacta	1680
ccagataat ccagcagcag gactgaggat gcccagggca agcgccagcc catgccatca	1740
Ccctcacaga gccttgggta tgcttgacca ttga	1774

K210> 18 <211> 938 <212> DNA <213> Homo sapiens <400> 18	
tgtaggaaga actcccttca ggacaggaca atagatggtt cctcccaggt gattaaggaa	60
aaagacaca gtattcagta agtgataagg aaactcttgt agaagcagag ttagaaaaat	120
tgccctaataa ttgggtctgct caaatgtgtg agttgtttgc actcagccaa atcttaaagt	180
acttacagaa tcaggaagca gccatctata ccaattctaa gttaatatgg actaaacgag	240
gttttattag tagcaaagaa aaattaaaaat cccaaactta caaggttttc aactaaagtt	300
tgccaaaagt taacagtgtg acatgtatta tcctactatc acacactctc aaaggatttc	360
tcagacagtt tgcaagaaat aacgtaatct atccttactc tacagtcca aatagactct	420
ttggtagcag tgactctcca aaactgccga ggtctagacc tcctcaatgc tgagaaagga	480
gaactctgca ccttcttagg ggaagagtgc tgtttttaca ctaaccagtc agggatagta	540
tgagatactg cctgacgttt acaggaaaag gcttctgaaa tcagacaacg cttttcaagc	600
tcttatacca acctctggag ttgggcaaca tggtctctcc ccttgctagg tcctgtggca	660
gccatcttgc tattacttgc cttcggggcc tgtattttta acctccttgt caaatttgtt	720
tcctctagga tcaaggccat caagctacag atggtcttac aaatggaacc ccaaatgagc	780
tcaactaaca acttctactg aggacacctg gactgaccca ctggcccttt cactggccta	840

āagagttccc ttctggagga cactacaact gcagggcccc gtcttcaccc ctatccagca 900
 ggaagtagct agatcagtca ttgcccaatt cccaacag 938

<210> 19 <211> 1308 <212> DNA <213> Homo sapiens <400> 19 60
 gatgcttgcc ccaggcacc tcagtcctgt tgttgatca tctggtcggg ggcttctggc
 ccaaagaacc tttgtcctct gaggcagtgc accttccagt gattgcctca gcattgtgga 120
 catgggcaag ggggcagctt gtttctcact ggacaatctt ttttaagggtg tccttccaaa 180
 ccacactggg aacaagccct accaggtgat tggcctgctc tattttctgt cctctctgaa 240
 ccaccaaggt ttgtctgtct gagggtcagt actaaggctg tggcctttct ctgatcttgc 300
 ttttcttttt tggcctgttc ctcttggtac ctattataga aactgaggt tgccagggtt 360
 aacaatggct ccagattttg ttcagggcac agggctcatt ttggagcttt ctctgatata 420
 ctgcagctga ttgggtaata aacttatctt ttaggatcaa ttgactctca agagagttgg 480
 gtgacagggg agtatatttc cttgaggcct cccatagccg ctctaggaag gcagaaggat 540
 tttcttctt tccctgagtt ataaaagaca tcattgaaca actcatggac tttttcccaa 600
 tctctcgtag tccttctaga acacaggtca gcagatgttt acgactccag tccccatgat 660
 ctgagcttag acaccagtgg ggatccatac tggggatggc ctgctgactg gtagggaatt 720
 tgtccctttc tttggctgtc attctatcat ttacttgact aagataccaa gtatctccaa 780
 tttctcaggt tgcagctaaa gctgcattct tttcattaaa ggccagggtt tgatctaata 840
 tcatgacatc tctccaagtg aggtcaaagg tttgccctag atccatagga catcagagaa 900
 ggagaagggg acatacacct gagttagcca aattcccctc cctctacagc ttgaagggga 960
 tcaataagcaat agcctgggga tttttgtggc cctttggaga tttctttgct tgtttccttc 1020
 tgggtggggg agattagagg aggttatca gtaataggaa ggggagctat agggaggcta 1080
 ggatatgggg gtaagctgag aggtcatctt gtgggatgta aattgcaagc tttgcatagt 1140
 tgtggatttt ccttacaatg aaaataaagc ttggacataa ggtatttcac tccatttgcc 1200
 ttccctctta cagaaaaggc caagctgcag gatagtactg taatttatac ttccttcagg 1260
 tggccatttc tccccatcag agagagaata ctggggctgg gccatagt 1308

<210> 20 <211> 711 <212> DNA <213> Homo sapiens <400> 20 60
 actgagagac aggactagct ggatttccta ggccgactaa gaatccctaa gcctagctgg
 gaaggtgacc acgtccacct ttaaacacgg ggcttgcaac ttagctcaca cctgaccaat 120
 cagagagctc actaaaatgc taattaggca aagacaggag gtaaagaaat agccaatcat 180
 ctattgctg agagcacagc aggagggaca acaatcggga tataaaccga ggcattcgag 240
 ctggcaacag cagccccctt ttgggtccct tccctttgta tgggagctgt tttcatgcta 300

```

tttcaactcta ttaaactcttg caactgcact cttctggtcc atgtttctta cggctcgagc 360
.tgagctttttg ctcaccgtcc accactgctg tttgccacca cgcagacct gccgctgact 420
cccatccctc tggatcctgc aggggtgtccg ctgtgctcct gatccagcga ggcgcccatt 480
gccgctccca attgggctaa aggcttgcca ttgttcctgc acggctaagt gcctggggttt 540
gttctaattg agctgaacac tagtcaactgg gttccatggg tctcttctgt gacccacggc 600
ttctaataga actataacac ttaccacatg gcccaagatt ccattccttg gaatccgtga 660
ggccaagaac tccaggtcag agaatacagag gcttgccacc atcttggaag c 711

```

```

<210> 21 <211> 711 <212> DNA <213> Homo sapiens <400> 21
actgagagac aggactagct ggatttccta ggctgactaa gaatccctaa gcctagctgg 60
gaaggtgacc acatccacct ttaaacacgg ggcttgcaac ttagctcaca cctgaccaat 120
cagagagctc actaaaatgc taattaggca aagacaggag gttaaagaaat agccaatcat 180
gtattgcctg agagcacagc aggagggaca atgatcgga tataaacca agtcttcgag 240
ccggcaacgg caacccctt tgggtccct ccctttgtat gggagctctg ttttcatgct 300
ttttcaactct attaaatctt gcaactgcac tcttctggtc catgtttctt acggcttgag 360
ctgagctttc gctcgccatc caccactgct gtttgccgcc accgcagacc cgccgctgac 420
tcccatccct ctggatcatg cagggtgtcc gctgtgctcc tgatccagcg aggcacccat 480
gccgctccc aatcgggcta aaggcttgcc attgttcctg catggctaag tgcctgggtt 540
catcctaatt gagctgaaca ctagtcaactg ggttccatgg ttctcttctg tgacccacag 600
tttctaatag agctataaca ctcaccgat ggccaaggt tccattcctt gaatccataa 660
ggccaagaac cccaggtcag agaacacgag gcttgccacc atcttgaggag c 711

```

```

<210> 22 <211> 2055 <212> DNA <213> Homo sapiens <220> <221> CDS <222> (1)..(2055)
<223>

```

```

<400> 22
ccc aag aca gcc aac tta gtt gca gac atc acc tcc tta gcc aaa tat 48
Pro Lys Thr Ala Asn Leu Val Ala Asp Ile Thr Ser Leu Ala Lys Tyr
1 5 10 15

caa caa gtt ctt aaa aca tta caa gga acc tat ccc tga gaa gag gga 96
Gln Gln Val Leu Lys Thr Leu Gln Gly Thr Tyr Pro Glu Glu Gly
20 25 30

aaa gaa cta ttc cac cct tgt gac atg gta tta gtc aag tcc ctt ccc 144
Lys Glu Leu Phe His Pro Cys Asp Met Val Leu Val Lys Ser Leu Pro
35 40 45

tct aat tcc cca tcc cta gat aca tcc tgg gaa gga ccc tac cca gtc 192
Ser Asn Ser Pro Ser Leu Asp Thr Ser Trp Glu Gly Pro Tyr Pro Val
50 55 60

att tta tct acc cca act gcg gtt aaa gtg gct gga gtg gag tct tgg 240

```

Ile	Leu	Ser	Thr	Pro	Thr	Ala	Val	Lys	Val	Ala	Gly	Val	Glu	Ser	Trp	
65						70					75					
ata	cat	cac	act	tga	gtc	aaa	tcc	tgg	ata	ctg	cca	aag	gaa	cct	gaa	288
Ile	His	His	Thr		Val	Lys	Ser	Trp	Ile	Leu	Pro	Lys	Glu	Pro	Glu	
80						85					90					
aat	cca	gga	gac	aac	gct	agc	tat	tcc	tgt	gaa	cct	cta	gag	gat	ttg	336
Asn	Pro	Gly	Asp	Asn	Ala	Ser	Tyr	Ser	Cys	Glu	Pro	Leu	Glu	Asp	Leu	
95					100					105					110	
cgc	ctg	ctc	ttc	aaa	caa	caa	cca	gga	gga	aag	taa	cta	aaa	tca	taa	384
Arg	Leu	Leu	Phe	Lys	Gln	Gln	Pro	Gly	Gly	Lys		Leu	Lys	Ser		
				115					120							
atc	ccc	atg	gcc	ctc	cct	tat	cat	att	ttt	ctc	ttt	act	gtt	ctt	tta	432
Ile	Pro	Met	Ala	Leu	Pro	Tyr	His	Ile	Phe	Leu	Phe	Thr	Val	Leu	Leu	
125					130					135					140	
ccc	tct	ttc	act	ctc	act	gca	ccc	cct	cca	tgc	cgc	tgt	atg	acc	agt	480
Pro	Ser	Phe	Thr	Leu	Thr	Ala	Pro	Pro	Pro	Cys	Arg	Cys	Met	Thr	Ser	
				145					150					155		
agc	tcc	cct	tac	caa	gag	ttt	cta	tgg	aga	atg	cag	cgt	ccc	gga	aat	528
Ser	Ser	Pro	Tyr	Gln	Glu	Phe	Leu	Trp	Arg	Met	Gln	Arg	Pro	Gly	Asn	
			160					165					170			
ttt	gat	gcc	cca	tcg	tat	agg	agt	ctt	tct	aag	gga	acc	ccc	acc	ttc	576
Ile	Asp	Ala	Pro	Ser	Tyr	Arg	Ser	Leu	Ser	Lys	Gly	Thr	Pro	Thr	Phe	
		175					180					185				
act	gcc	cac	acc	cat	atg	ccc	cgc	aac	tgc	tat	cac	tct	gcc	act	ctt	624
Thr	Ala	His	Thr	His	Met	Pro	Arg	Asn	Cys	Tyr	His	Ser	Ala	Thr	Leu	
	190					195					200					
atg	cat	gca	aat	act	cat	tat	tgg	aca	gga	aaa	atg	att	aat	cct		672
Lys	Met	His	Ala	Asn	Thr	His	Tyr	Trp	Thr	Gly	Lys	Met	Ile	Asn	Pro	
205				210						215				220		
agt	tgt	cct	gga	gga	ctt	gga	gtc	act	gtc	tgt	tgg	act	tac	ttc	acc	720
Ser	Cys	Pro	Gly	Gly	Leu	Gly	Val	Thr	Val	Cys	Trp	Thr	Tyr	Phe	Thr	
			225				230							235		
caa	act	ggt	atg	tct	gat	ggg	ggt	gga	gtt	caa	gat	cag	gca	aga	gaa	768
Gln	Thr	Gly	Met	Ser	Asp	Gly	Gly	Gly	Val	Gln	Asp	Gln	Ala	Arg	Glu	
		240					245						250			
aaa	cat	gta	aaa	gaa	gta	atc	tcc	caa	ctc	acc	cgg	gta	cat	ggc	acc	816
Lys	His	Val	Lys	Glu	Val	Ile	Ser	Gln	Leu	Thr	Arg	Val	His	Gly	Thr	
		255					260					265				
tct	agc	ccc	tac	aaa	gga	cta	gat	ctc	tca	aaa	cta	cat	gaa	acc	ctc	864
Ser	Ser	Pro	Tyr	Lys	Gly	Leu	Asp	Leu	Ser	Lys	Leu	His	Glu	Thr	Leu	
		270				275						280				
cgt	acc	cat	act	cgc	ctg	gta	agc	cta	ttt	aat	acc	acc	ctc	act	ggg	912
Arg	Thr	His	Thr	Arg	Leu	Val	Ser	Leu	Phe	Asn	Thr	Thr	Leu	Thr	Gly	
285				290						295				300		
ctc	cat	gag	gtc	tcg	gcc	caa	aac	cct	act	aac	tgt	tgg	ata	tgc	ctc	960
Leu	His	Glu	Val	Ser	Ala	Gln	Asn	Pro	Thr	Asn	Cys	Trp	Ile	Cys	Leu	
			305						310					315		

ccc ctg aac ttc agg cca tat gtt tca atc cct gta cct gaa caa tgg	1008
Pro Leu Asn Phe Arg Pro Tyr Val Ser Ile Pro Val Pro Glu Gln Trp	
320 325 330	
aac aac ttc agc aca gaa ata aac acc act tcc gtt tta gta gga cct	1056
Asn Asn Phe Ser Thr Glu Ile Asn Thr Thr Ser Val Leu Val Gly Pro	
335 340 345	
ctt gtt tcc aat ctg gaa ata acc cat acc tca aac ctc acc tgt gta	1104
Leu Val Ser Asn Leu Glu Ile Thr His Thr Ser Asn Leu Thr Cys Val	
350 355 360	
aaa ttt agc aat act aca tac aca acc aac tcc caa tgc atc agg tgg	1152
Lys Phe Ser Asn Thr Thr Tyr Thr Thr Asn Ser Gln Cys Ile Arg Trp	
365 370 375 380	
gta act cct ccc aca caa ata gtc tgc cta ccc tca gga ata ttt ttt	1200
Val Thr Pro Pro Thr Gln Ile Val Cys Leu Pro Ser Gly Ile Phe Phe	
385 390 395	
gtc tgt ggt acc tca gcc tat cgt tgt ttg aat ggc tct tca gaa tct	1248
Val Cys Gly Thr Ser Ala Tyr Arg Cys Leu Asn Gly Ser Ser Glu Ser	
400 405 410	
atg tgc ttc ctc tca ttc tta gtg ccc cct atg acc atc tac act gaa	1296
Met Cys Phe Leu Ser Phe Leu Val Pro Pro Met Thr Ile Tyr Thr Glu	
415 420 425	
aaa gat tta tac agt tat gtc ata tct aag ccc cgc aac aaa aga gta	1344
Gln Asp Leu Tyr Ser Tyr Val Ile Ser Lys Pro Arg Asn Lys Arg Val	
430 435 440	
ccc att ctt cct ttt gtt ata gga gca gga gtg cta ggt gca cta ggt	1392
Pro Ile Leu Pro Phe Val Ile Gly Ala Gly Val Leu Gly Ala Leu Gly	
445 450 455 460	
act ggc att ggc ggt atc aca acc tct act cag ttc tac tac aaa cta	1440
Thr Gly Ile Gly Gly Ile Thr Thr Ser Thr Gln Phe Tyr Tyr Lys Leu	
465 470 475	
tct caa gaa cta aat ggg gac atg gaa cgg gtc gcc gac tcc ctg gtc	1488
Ser Gln Glu Leu Asn Gly Asp Met Glu Arg Val Ala Asp Ser Leu Val	
480 485 490	
acc ttg caa gat caa ctt aac tcc cta gca gca gta gtc ctt caa aat	1536
Thr Leu Gln Asp Gln Leu Asn Ser Leu Ala Ala Val Val Leu Gln Asn	
495 500 505	
cga aga gct tta gac ttg cta acc gct gaa aga ggg gga acc tgt tta	1584
Arg Arg Ala Leu Asp Leu Leu Thr Ala Glu Arg Gly Gly Thr Cys Leu	
510 515 520	
ttt tta ggg gaa gaa tgc tgt tat tat gtt aat caa tcc gga atc gtc	1632
Phe Leu Gly Glu Glu Cys Cys Tyr Tyr Val Asn Gln Ser Gly Ile Val	
525 530 535 540	
act gag aaa gtt aaa gaa att cga gat cga ata caa cgt aga gca gag	1680
Thr Glu Lys Val Lys Glu Ile Arg Asp Arg Ile Gln Arg Arg Ala Glu	
545 550 555	
gag ctt cga aac act gga ccc tgg ggc ctc ctc agc caa tgg atg ccc	1728
Glu Leu Arg Asn Thr Gly Pro Trp Gly Leu Leu Ser Gln Trp Met Pro	

I 5 10 15
 Ala Ser Tyr Ser Cys Glu Pro Leu Glu Asp Leu Arg Leu Leu Phe Lys
 20 25 30
 Gln Gln Pro Gly Gly Lys
 35
 <210> 26 <211> 540 <212> PRT <213> Homo sapiens <400> 26
 Ile Pro Met Ala Leu Pro Tyr His Ile Phe Leu Phe Thr Val Leu Leu
 1 5 10 15
 Pro Ser Phe Thr Leu Thr Ala Pro Pro Pro Cys Arg Cys Met Thr Ser
 20 25 30
 Ser Ser Pro Tyr Gln Glu Phe Leu Trp Arg Met Gln Arg Pro Gly Asn
 35 40 45
 Ile Asp Ala Pro Ser Tyr Arg Ser Leu Ser Lys Gly Thr Pro Thr Phe
 50 55 60
 Thr Ala His Thr His Met Pro Arg Asn Cys Tyr His Ser Ala Thr Leu
 65 70 75 80
 Cys Met His Ala Asn Thr His Tyr Trp Thr Gly Lys Met Ile Asn Pro
 85 90 95
 Ser Cys Pro Gly Gly Leu Gly Val Thr Val Cys Trp Thr Tyr Phe Thr
 100 105 110
 Gln Thr Gly Met Ser Asp Gly Gly Gly Val Gln Asp Gln Ala Arg Glu
 115 120 125
 Lys His Val Lys Glu Val Ile Ser Gln Leu Thr Arg Val His Gly Thr
 130 135 140
 Ser Ser Pro Tyr Lys Gly Leu Asp Leu Ser Lys Leu His Glu Thr Leu
 145 150 155 160
 Arg Thr His Thr Arg Leu Val Ser Leu Phe Asn Thr Thr Leu Thr Gly
 165 170 175
 Leu His Glu Val Ser Ala Gln Asn Pro Thr Asn Cys Trp Ile Cys Leu
 180 185 190
 Pro Leu Asn Phe Arg Pro Tyr Val Ser Ile Pro Val Pro Glu Gln Trp

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

Asn	Asn	Phe	Ser	Thr	Glu	Ile	Asn	Thr	Thr	Ser	Val	Leu	Val	Gly	Pro
210						215					220				
Leu	Val	Ser	Asn	Leu	Glu	Ile	Thr	His	Thr	Ser	Asn	Leu	Thr	Cys	Val
225					230					235					240
Lys	Phe	Ser	Asn	Thr	Thr	Tyr	Thr	Thr	Asn	Ser	Gln	Cys	Ile	Arg	Trp
				245					250					255	
Val	Thr	Pro	Pro	Thr	Gln	Ile	Val	Cys	Leu	Pro	Ser	Gly	Ile	Phe	Phe
			260					265					270		
Val	Cys	Gly	Thr	Ser	Ala	Tyr	Arg	Cys	Leu	Asn	Gly	Ser	Ser	Glu	Ser
		275					280					285			
Met	Cys	Phe	Leu	Ser	Phe	Leu	Val	Pro	Pro	Met	Thr	Ile	Tyr	Thr	Glu
	290					295					300				
Gln	Asp	Leu	Tyr	Ser	Tyr	Val	Ile	Ser	Lys	Pro	Arg	Asn	Lys	Arg	Val
305					310					315					320
Pro	Ile	Leu	Pro	Phe	Val	Ile	Gly	Ala	Gly	Val	Leu	Gly	Ala	Leu	Gly
				325					330					335	
Thr	Gly	Ile	Gly	Gly	Ile	Thr	Thr	Ser	Thr	Gln	Phe	Tyr	Tyr	Lys	Leu
			340					345					350		
Ser	Gln	Glu	Leu	Asn	Gly	Asp	Met	Glu	Arg	Val	Ala	Asp	Ser	Leu	Val
		355					360					365			
Thr	Leu	Gln	Asp	Gln	Leu	Asn	Ser	Leu	Ala	Ala	Val	Val	Leu	Gln	Asn
	370					375					380				
Arg	Arg	Ala	Leu	Asp	Leu	Leu	Thr	Ala	Glu	Arg	Gly	Gly	Thr	Cys	Leu
385					390					395					400
Phe	Leu	Gly	Glu	Glu	Cys	Cys	Tyr	Tyr	Val	Asn	Gln	Ser	Gly	Ile	Val
				405					410					415	
Thr	Glu	Lys	Val	Lys	Glu	Ile	Arg	Asp	Arg	Ile	Gln	Arg	Arg	Ala	Glu
			420					425					430		
Glu	Leu	Arg	Asn	Thr	Gly	Pro	Trp	Gly	Leu	Leu	Ser	Gln	Trp	Met	Pro
		435					440					445			

Trp Ile Leu Pro Phe Leu Gly Pro Leu Ala Ala Ile Ile Leu Leu Leu
450 455 460

Leu Phe Gly Pro Cys Ile Phe Asn Leu Leu Val Asn Phe Val Ser Ser
465 470 475 480

Arg Ile Glu Ala Val Lys Leu Gln Met Glu Pro Lys Met Gln Ser Lys
485 490 495

Thr Lys Ile Tyr Arg Arg Pro Leu Asp Arg Pro Ala Ser Pro Arg Ser
500 505 510

Asp Val Asn Asp Ile Lys Gly Thr Pro Pro Glu Glu Ile Ser Ala Ala
515 520 525

Gln Pro Leu Leu Arg Pro Asn Ser Ala Gly Ser Ser
530 535 540

<210> 27 <211> 15 <212> PRT <213> Homo sapiens <400> 27

er Gly Arg Arg Pro Thr Ser Pro Thr Ala Leu Arg Phe Ser Cys
5 10 15

<210> 28 <211> 1080 <212> DNA <213> Homo sapiens <220> <221> CDS <222> (1)..(1080)
<223>

<400> 28

acc tct ttt gta gaa aag gca aat gga gtg aag tgc cat aag tac aaa 48
Thr Ser Phe Val Glu Lys Ala Asn Gly Val Lys Cys His Lys Tyr Lys
5 10 15

tct tct ttt cat taa gag aca act cac aat tat gta aaa agt gtg att 96
Leu Ser Phe His Glu Thr Thr His Asn Tyr Val Lys Ser Val Ile
20 25 30

tat gcc cta cag gaa gcc ttc aga gtc tac ctc cct atc cca gca tcc 144
Tyr Ala Leu Gln Glu Ala Phe Arg Val Tyr Leu Pro Ile Pro Ala Ser
35 40 45

ccg act cct tcc cca act aat aag gac ccc cct tca acc caa atg gtc 192
Pro Thr Pro Ser Pro Thr Asn Lys Asp Pro Pro Ser Thr Gln Met Val
50 55 60

caa aag gag ata gac aaa agg gta aac agt gaa cca aag agt gcc aat 240
Gln Lys Glu Ile Asp Lys Arg Val Asn Ser Glu Pro Lys Ser Ala Asn
65 70 75

att ccc caa tta tga ccc ctc caa gca gtg gga gga aga gaa ttc ggc 288
Ile Pro Gln Leu Pro Leu Gln Ala Val Gly Gly Arg Glu Phe Gly
80 85 90

cca gcc aga gtg cat gtg cct ttt tct ctc cca gac tta aag caa ata 336
Pro Ala Arg Val His Val Pro Phe Ser Leu Pro Asp Leu Lys Gln Ile
95 100 105 110

aaa	aca	gac	tta	ggt	aaa	ttc	tca	gat	aac	cct	gat	ggc	tat	att	gat	384
Lys	Thr	Asp	Leu	Gly	Lys	Phe	Ser	Asp	Asn	Pro	Asp	Gly	Tyr	Ile	Asp	
				115					120					125		
gtt	tta	caa	ggg	tta	gga	caa	ttc	ttt	gat	ctg	aca	tgg	aga	gat	ata	432
Val	Leu	Gln	Gly	Leu	Gly	Gln	Phe	Phe	Asp	Leu	Thr	Trp	Arg	Asp	Ile	
			130					135					140			
atg	tca	ctg	cta	aat	cag	aca	cta	acc	cca	aat	gag	aga	agt	gcc	acc	480
Met	Ser	Leu	Leu	Asn	Gln	Thr	Leu	Thr	Pro	Asn	Glu	Arg	Ser	Ala	Thr	
		145					150					155				
ata	act	gca	gcc	tga	gag	ttt	ggc	gat	ctc	tgg	tat	ctc	agt	cag	gtc	528
Ile	Thr	Ala	Ala		Glu	Phe	Gly	Asp	Leu	Trp	Tyr	Leu	Ser	Gln	Val	
	160						165					170				
aat	gat	agg	atg	aca	aca	gag	gaa	aga	gaa	tga	ttc	ccc	aca	ggc	cag	576
Asn	Asp	Arg	Met	Thr	Thr	Glu	Glu	Arg	Glu		Phe	Pro	Thr	Gly	Gln	
	175					180						185				
cag	gca	gtt	ccc	agt	cta	gac	cct	cat	tgg	gac	aca	gaa	tca	gaa	cat	624
Gln	Ala	Val	Pro	Ser	Leu	Asp	Pro	His	Trp	Asp	Thr	Glu	Ser	Glu	His	
	190					195					200					
gga	gat	tgg	tgc	tgc	aga	cat	ttg	cta	act	tgt	gtg	cta	gaa	gga	cta	672
Gly	Asp	Trp	Cys	Cys	Arg	His	Leu	Leu	Thr	Cys	Val	Leu	Glu	Gly	Leu	
	205				210					215					220	
agg	aaa	act	agg	aag	aag	tct	atg	aat	tac	tca	atg	atg	tcc	acc	ata	720
Arg	Lys	Thr	Arg	Lys	Lys	Ser	Met	Asn	Tyr	Ser	Met	Met	Ser	Thr	Ile	
				225					230					235		
tca	cag	gga	agg	gaa	gaa	aat	cct	act	gcc	ttt	ctg	gag	aga	cta	agg	768
Thr	Gln	Gly	Arg	Glu	Glu	Asn	Pro	Thr	Ala	Phe	Leu	Glu	Arg	Leu	Arg	
			240					245					250			
gag	gca	ttg	agg	aag	cgt	gcc	tct	ctg	tca	cct	gac	tct	tct	gaa	ggc	816
Glu	Ala	Leu	Arg	Lys	Arg	Ala	Ser	Leu	Ser	Pro	Asp	Ser	Ser	Glu	Gly	
		255				260						265				
caa	cta	atc	tta	aag	cgt	aag	ttt	atc	act	cag	tca	gct	gca	gac	att	864
Gln	Leu	Ile	Leu	Lys	Arg	Lys	Phe	Ile	Thr	Gln	Ser	Ala	Ala	Asp	Ile	
	270					275					280					
aga	aaa	aaa	ctt	caa	aag	tct	gcc	gta	ggc	ccg	gag	caa	aac	tta	gaa	912
Arg	Lys	Lys	Leu	Gln	Lys	Ser	Ala	Val	Gly	Pro	Glu	Gln	Asn	Leu	Glu	
	285				290					295				300		
acc	cta	ttg	aac	ttg	gca	acc	tcg	gtt	ttt	tat	aat	aga	gat	cag	gag	960
Thr	Leu	Leu	Asn	Leu	Ala	Thr	Ser	Val	Phe	Tyr	Asn	Arg	Asp	Gln	Glu	
			305						310					315		
gag	cag	gcg	gaa	cag	gac	aaa	cgg	gat	taa	aaa	aaa	ggc	cac	cgc	ttt	1008
Glu	Gln	Ala	Glu	Gln	Asp	Lys	Arg	Asp		Lys	Lys	Gly	His	Arg	Phe	
			320					325						330		
agt	cat	gac	cct	cag	gca	agt	gga	ctt	tgg	agg	ctc	tgg	aaa	agg	gaa	1056
Ser	His	Asp	Pro	Gln	Ala	Ser	Gly	Leu	Trp	Arg	Leu	Trp	Lys	Arg	Glu	
			335					340					345			
aag	ctg	ggc	aaa	ttg	aat	gcc	taa									1080
Lys	Leu	Gly	Lys	Leu	Asn	Ala										

350

<210> 29 <211> 20 <212> PRT <213> Homo sapiens <400> 29

Thr Ser Phe Val Glu Lys Ala Asn Gly Val Lys Cys His Lys Tyr Lys
1 5 10 15

Leu Ser Phe His
20

<210> 30 <211> 63 <212> PRT <213> Homo sapiens <400> 30

Glu Thr Thr His Asn Tyr Val Lys Ser Val Ile Tyr Ala Leu Gln Glu
1 5 10 15

Ala Phe Arg Val Tyr Leu Pro Ile Pro Ala Ser Pro Thr Pro Ser Pro
20 25 30

Thr Asn Lys Asp Pro Pro Ser Thr Gln Met Val Gln Lys Glu Ile Asp
35 40 45

Lys Arg Val Asn Ser Glu Pro Lys Ser Ala Asn Ile Pro Gln Leu
50 55 60

<210> 31 <211> 79 <212> PRT <213> Homo sapiens <400> 31

Pro Leu Gln Ala Val Gly Gly Arg Glu Phe Gly Pro Ala Arg Val His
5 10 15

Val Pro Phe Ser Leu Pro Asp Leu Lys Gln Ile Lys Thr Asp Leu Gly
20 25 30

Lys Phe Ser Asp Asn Pro Asp Gly Tyr Ile Asp Val Leu Gln Gly Leu
35 40 45

Gly Gln Phe Phe Asp Leu Thr Trp Arg Asp Ile Met Ser Leu Leu Asn
50 55 60

Gln Thr Leu Thr Pro Asn Glu Arg Ser Ala Thr Ile Thr Ala Ala
65 70 75

<210> 32 <211> 21 <212> PRT <213> Homo sapiens <400> 32

Glu Phe Gly Asp Leu Trp Tyr Leu Ser Gln Val Asn Asp Arg Met Thr
1 5 10 15

Thr Glu Glu Arg Glu
20

<210> 33 <211> 142 <212> PRT <213> Homo sapiens <400> 33

Phe Pro Thr Gly Gln Gln Ala Val Pro Ser Leu Asp Pro His Trp Asp
1 5 10 15

Thr Glu Ser Glu His Gly Asp Trp Cys Cys Arg His Leu Leu Thr Cys
20 25 30

Val Leu Glu Gly Leu Arg Lys Thr Arg Lys Lys Ser Met Asn Tyr Ser
35 40 45

Met Met Ser Thr Ile Thr Gln Gly Arg Glu Glu Asn Pro Thr Ala Phe
50 55 60

Leu Glu Arg Leu Arg Glu Ala Leu Arg Lys Arg Ala Ser Leu Ser Pro
65 70 75 80

Asp Ser Ser Glu Gly Gln Leu Ile Leu Lys Arg Lys Phe Ile Thr Gln
85 90 95

Ser Ala Ala Asp Ile Arg Lys Lys Leu Gln Lys Ser Ala Val Gly Pro
100 105 110

Glu Gln Asn Leu Glu Thr Leu Leu Asn Leu Ala Thr Ser Val Phe Tyr
115 120 125

Asn Arg Asp Gln Glu Glu Gln Ala Glu Gln Asp Lys Arg Asp
130 135 140

<210> 34 <211> 29 <212> PRT <213> Homo sapiens <400> 34

Lys Lys Gly His Arg Phe Ser His Asp Pro Gln Ala Ser Gly Leu Trp
1 5 10 15

Arg Leu Trp Lys Arg Glu Lys Leu Gly Lys Leu Asn Ala
20 25

<210> 35 <211> 685 <212> PRT <213> Homo sapiens <220> <221> misc_feature <222>
(29)..(29) <223> Xaa is any amino acid

<220> <221> misc_feature <222> (85)..(85) <223> Xaa is any amino acid

<220> <221> misc_feature <222> (124)..(124) <223> Xaa is any amino acid

<220> <221> misc_feature <222> (128)..(128) <223> Xaa is any amino acid

<220> <221> misc_feature <222> (669)..(669) <223> Xaa is any amino acid

<220> <221> misc_feature <222> (685)..(685) <223> Xaa is any amino acid

<400> 35

Pro Lys Thr Ala Asn Leu Val Ala Asp Ile Thr Ser Leu Ala Lys Tyr
1 5 10 15

Gln Gln Val Leu Lys Thr Leu Gln Gly Thr Tyr Pro Xaa Glu Glu Gly
20 25 30

Lys Glu Leu Phe His Pro Cys Asp Met Val Leu Val Lys Ser Leu Pro
35 40 45

Ser Asn Ser Pro Ser Leu Asp Thr Ser Trp Glu Gly Pro Tyr Pro Val
50 55 60

Ile Leu Ser Thr Pro Thr Ala Val Lys Val Ala Gly Val Glu Ser Trp
65 70 75 80

Ile His His Thr Xaa Val Lys Ser Trp Ile Leu Pro Lys Glu Pro Glu
85 90 95

Asn Pro Gly Asp Asn Ala Ser Tyr Ser Cys Glu Pro Leu Glu Asp Leu
100 105 110

Arg Leu Leu Phe Lys Gln Gln Pro Gly Gly Lys Xaa Leu Lys Ser Xaa
115 120 125

Ile Pro Met Ala Leu Pro Tyr His Ile Phe Leu Phe Thr Val Leu Leu
130 135 140

Pro Ser Phe Thr Leu Thr Ala Pro Pro Pro Cys Arg Cys Met Thr Ser
145 150 155 160

Ser Ser Pro Tyr Gln Glu Phe Leu Trp Arg Met Gln Arg Pro Gly Asn
165 170 175

Ile Asp Ala Pro Ser Tyr Arg Ser Leu Ser Lys Gly Thr Pro Thr Phe
180 185 190

Thr Ala His Thr His Met Pro Arg Asn Cys Tyr His Ser Ala Thr Leu
195 200 205

Cys Met His Ala Asn Thr His Tyr Trp Thr Gly Lys Met Ile Asn Pro
210 215 220

Ser Cys Pro Gly Gly Leu Gly Val Thr Val Cys Trp Thr Tyr Phe Thr
225 230 235 240

Gln Thr Gly Met Ser Asp Gly Gly Gly Val Gln Asp Gln Ala Arg Glu
245 250 255

Lys His Val Lys Glu Val Ile Ser Gln Leu Thr Arg Val His Gly Thr
260 265 270

Ser Ser Pro Tyr Lys Gly Leu Asp Leu Ser Lys Leu His Glu Thr Leu
275 280 285

Arg Thr His Thr Arg Leu Val Ser Leu Phe Asn Thr Thr Leu Thr Gly
290 295 300

Leu His Glu Val Ser Ala Gln Asn Pro Thr Asn Cys Trp Ile Cys Leu
305 310 315 320

Pro Leu Asn Phe Arg Pro Tyr Val Ser Ile Pro Val Pro Glu Gln Trp
325 330 335

Asn Asn Phe Ser Thr Glu Ile Asn Thr Thr Ser Val Leu Val Gly Pro
340 345 350

Leu Val Ser Asn Leu Glu Ile Thr His Thr Ser Asn Leu Thr Cys Val
355 360 365

Lys Phe Ser Asn Thr Thr Tyr Thr Thr Asn Ser Gln Cys Ile Arg Trp
370 375 380

Val Thr Pro Pro Thr Gln Ile Val Cys Leu Pro Ser Gly Ile Phe Phe
385 390 395 400

Val Cys Gly Thr Ser Ala Tyr Arg Cys Leu Asn Gly Ser Ser Glu Ser
405 410 415

Met Cys Phe Leu Ser Phe Leu Val Pro Pro Met Thr Ile Tyr Thr Glu
420 425 430

Gln Asp Leu Tyr Ser Tyr Val Ile Ser Lys Pro Arg Asn Lys Arg Val
435 440 445

Pro Ile Leu Pro Phe Val Ile Gly Ala Gly Val Leu Gly Ala Leu Gly
450 455 460

Thr Gly Ile Gly Gly Ile Thr Thr Ser Thr Gln Phe Tyr Tyr Lys Leu
465 470 475 480

Ser Gln Glu Leu Asn Gly Asp Met Glu Arg Val Ala Asp Ser Leu Val
485 490 495

Thr Leu Gln Asp Gln Leu Asn Ser Leu Ala Ala Val Val Leu Gln Asn

500 505 510
 Arg Arg Ala Leu Asp Leu Leu Thr Ala Glu Arg Gly Gly Thr Cys Leu
 515 520 525
 Phe Leu Gly Glu Glu Cys Cys Tyr Tyr Val Asn Gln Ser Gly Ile Val
 530 535 540
 Thr Glu Lys Val Lys Glu Ile Arg Asp Arg Ile Gln Arg Arg Ala Glu
 545 550 555 560
 Glu Leu Arg Asn Thr Gly Pro Trp Gly Leu Leu Ser Gln Trp Met Pro
 565 570 575
 Trp Ile Leu Pro Phe Leu Gly Pro Leu Ala Ala Ile Ile Leu Leu Leu
 580 585 590
 Leu Phe Gly Pro Cys Ile Phe Asn Leu Leu Val Asn Phe Val Ser Ser
 595 600 605
 Arg Ile Glu Ala Val Lys Leu Gln Met Glu Pro Lys Met Gln Ser Lys
 610 615 620
 Thr Lys Ile Tyr Arg Arg Pro Leu Asp Arg Pro Ala Ser Pro Arg Ser
 625 630 635 640
 Asp Val Asn Asp Ile Lys Gly Thr Pro Pro Glu Glu Ile Ser Ala Ala
 645 650 655
 Gln Pro Leu Leu Arg Pro Asn Ser Ala Gly Ser Ser Xaa Ser Gly Arg
 660 665 670
 Arg Pro Thr Ser Pro Thr Ala Leu Arg Phe Ser Cys Xaa
 675 680 685

<210> 36 <211> 360 <212> PRT <213> Homo sapiens <220> <221> misc_feature <222>
 (21)..(21) <223> Xaa is any amino acid
 <220> <221> misc_feature <222> (85)..(85) <223> Xaa is any amino acid
 <220> <221> misc_feature <222> (165)..(165) <223> Xaa is any amino acid
 <220> <221> misc_feature <222> (187)..(187) <223> Xaa is any amino acid
 <220> <221> misc_feature <222> (330)..(330) <223> Xaa is any amino acid
 <220> <221> misc_feature <222> (360)..(360) <223> Xaa is any amino acid
 <400> 36

Thr Ser Phe Val Glu Lys Ala Asn Gly Val Lys Cys His Lys Tyr Lys
 1 5 10 15
 Leu Ser Phe His Xaa Glu Thr Thr His Asn Tyr Val Lys Ser Val Ile
 20 25 30
 Tyr Ala Leu Gln Glu Ala Phe Arg Val Tyr Leu Pro Ile Pro Ala Ser
 35 40 45
 Pro Thr Pro Ser Pro Thr Asn Lys Asp Pro Pro Ser Thr Gln Met Val
 50 55 60
 Gln Lys Glu Ile Asp Lys Arg Val Asn Ser Glu Pro Lys Ser Ala Asn
 65 70 75 80
 Ile Pro Gln Leu Xaa Pro Leu Gln Ala Val Gly Gly Arg Glu Phe Gly
 85 90 95
 Pro Ala Arg Val His Val Pro Phe Ser Leu Pro Asp Leu Lys Gln Ile
 100 105 110
 Lys Thr Asp Leu Gly Lys Phe Ser Asp Asn Pro Asp Gly Tyr Ile Asp
 115 120 125
 Val Leu Gln Gly Leu Gly Gln Phe Phe Asp Leu Thr Trp Arg Asp Ile
 130 135 140
 Met Ser Leu Leu Asn Gln Thr Leu Thr Pro Asn Glu Arg Ser Ala Thr
 145 150 155 160
 Ile Thr Ala Ala Xaa Glu Phe Gly Asp Leu Trp Tyr Leu Ser Gln Val
 165 170 175
 Asn Asp Arg Met Thr Thr Glu Glu Arg Glu Xaa Phe Pro Thr Gly Gln
 180 185 190
 Gln Ala Val Pro Ser Leu Asp Pro His Trp Asp Thr Glu Ser Glu His
 195 200 205
 Gly Asp Trp Cys Cys Arg His Leu Leu Thr Cys Val Leu Glu Gly Leu
 210 215 220
 Arg Lys Thr Arg Lys Lys Ser Met Asn Tyr Ser Met Met Ser Thr Ile
 225 230 235 240
 Thr Gln Gly Arg Glu Glu Asn Pro Thr Ala Phe Leu Glu Arg Leu Arg
 245 250 255

Glu Ala Leu Arg Lys Arg Ala Ser Leu Ser Pro Asp Ser Ser Glu Gly
 260 265 270

Gln Leu Ile Leu Lys Arg Lys Phe Ile Thr Gln Ser Ala Ala Asp Ile
 275 280 285

Arg Lys Lys Leu Gln Lys Ser Ala Val Gly Pro Glu Gln Asn Leu Glu
 290 295 300

Thr Leu Leu Asn Leu Ala Thr Ser Val Phe Tyr Asn Arg Asp Gln Glu
 305 310 315 320

Glu Gln Ala Glu Gln Asp Lys Arg Asp Xaa Lys Lys Gly His Arg Phe
 325 330 335

Ser His Asp Pro Gln Ala Ser Gly Leu Trp Arg Leu Trp Lys Arg Glu
 340 345 350

Lys Leu Gly Lys Leu Asn Ala Xaa
 355 360

<210> 37 <211> 26 <212> DNA <213> Homo sapiens <400> 37
 ggaccataga ggacactcca ggacta 26

<210> 38 <211> 25 <212> DNA <213> Homo sapiens <400> 38
 cctcagtcct gctgctggat catct 25

<210> 39 <211> 27 <212> DNA <213> Homo sapiens <400> 39
 cctccaagca gtgggaggaa gagaatt 27

<210> 40 <211> 28 <212> DNA <213> Homo sapiens <400> 40
 ccttccctgt gttattgtgg acatcatt 28

<210> 41 <211> 30 <212> DNA <213> Homo sapiens <400> 41
 ggaagaagtc tatgaattat tcaatgatgt 30

<210> 42 <211> 27 <212> DNA <213> Homo sapiens <400> 42
 gggacacaga atcagaacat ggagatt 27

<210> 43 <211> 27 <212> DNA <213> Homo sapiens <400> 43
 gccttcagaa gagtcagggtg acagaga 27

<210> 44 <211> 25 <212> DNA <213> Homo sapiens <400> 44
 gagcctccaa agtccacttg cctga 25

<210> 45 <211> 29 <212> DNA <213> Homo sapiens <400> 45

gatttcagta tctactagtc tgggtagat	29
<210> 46 <211> 27 <212> DNA <213> Homo sapiens <400> 46 ctaggaaatc cagctagtcc tgtctca	27
<210> 47 <211> 28 <212> DNA <213> Homo sapiens <400> 47 ccaagacagc caacttagtt gcagacat	28
<210> 48 <211> 28 <212> DNA <213> Homo sapiens <400> 48 ggacgctgca ttctccatag aaactctt	28
<210> 49 <211> 29 <212> DNA <213> Homo sapiens <400> 49 gcaatactac atacacaacc aactcccaa	29
<210> 50 <211> 26 <212> DNA <213> Homo sapiens <400> 50 gggggaggca tatccaacag ttagta	26
<210> 51 <211> 30 <212> DNA <213> Homo sapiens <400> 51 ccatctacac tgaacaagat ttatacactt	30
<210> 52 <211> 28 <212> DNA <213> Homo sapiens <400> 52 atgccagta cctagtgcac ctagcact	28
<210> 53 <211> 31 <212> DNA <213> Homo sapiens <400> 53 egaataacaac gtagagcaga ggagcttcga a	31
<210> 54 <211> 28 <212> DNA <213> Homo sapiens <400> 54 gcccaagat gcagtccaag actaagat	28
<210> 55 <211> 27 <212> DNA <213> Homo sapiens <400> 55 gcgtagtaga ggttgtgcag ctgagat	27
<210> 56 <211> 27 <212> DNA <213> Homo sapiens <400> 56 cccttaccaa gagtttctat ggagaat	27
<210> 57 <211> 27 <212> DNA <213> Homo sapiens <400> 57 accgctctaa ctgcttcctg ctgaatt	27
<210> 58 <211> 420 <212> PRT <213> Homo sapiens <220> <221> misc_feature <222> (21)..(21) <223> Xaa is any amino acid	
<220> <221> misc_feature <222> (86)..(86) <223> Xaa is any amino acid	
<220> <221> misc_feature <222> (166)..(166) <223> Xaa is any amino acid	
<220> <221> misc_feature <222> (188)..(188) <223> Xaa is any amino acid	
<220> <221> misc_feature <222> (331)..(331) <223> Xaa is any amino acid	

<220> <221> misc_feature <222> (361)..(361) <223> Xaa is any amino acid
 <220> <221> misc_feature <222> (362)..(362) <223> Xaa is any amino acid
 <220> <221> misc_feature <222> (374)..(374) <223> Xaa is any amino acid
 <220> <221> misc_feature <222> (380)..(380) <223> Xaa is any amino acid
 <220> <221> misc_feature <222> (382)..(382) <223> Xaa is any amino acid
 <220> <221> misc_feature <222> (408)..(408) <223> Xaa is any amino acid
 <220> <221> misc_feature <222> (413)..(413) <223> Xaa is any amino acid
 <400> 58

Thr Ser Phe Val Glu Lys Ala Asn Gly Val Lys Cys His Lys Tyr Lys
 1 5 10 15

Leu Ser Phe His Xaa Glu Thr Thr His Asn Tyr Val Lys Ser Val Ile
 20 25 30

Tyr Ala Leu Gln Glu Ala Phe Arg Val Tyr Leu Pro Ile Leu Pro Ala
 35 40 45

Ser Pro Thr Pro Ser Pro Thr Asn Lys Asp Pro Pro Ser Thr Gln Met
 50 55 60

Val Gln Lys Glu Ile Asp Lys Arg Val Asn Ser Glu Pro Lys Ser Ala
 65 70 75 80

Asn Ile Pro Gln Leu Xaa Pro Leu Gln Ala Val Gly Gly Arg Glu Phe
 85 90 95

Gly Pro Ala Arg Val His Val Pro Phe Ser Leu Pro Asp Leu Lys Gln
 100 105 110

Ile Lys Thr Asp Leu Gly Lys Phe Ser Asp Asn Pro Asp Gly Tyr Ile
 115 120 125

Asp Val Leu Gln Gly Leu Gly Gln Phe Phe Asp Leu Thr Trp Arg Asp
 130 135 140

Ile Met Ser Leu Leu Asn Gln Thr Leu Thr Pro Asn Glu Arg Ser Ala
 145 150 155 160

Thr Ile Thr Ala Ala Xaa Glu Phe Gly Asp Leu Trp Tyr Leu Ser Gln
 165 170 175

Val Asn Asp Arg Met Thr Thr Glu Glu Arg Glu Xaa Phe Pro Thr Gly
 180 185 190

Gln Gln Ala Val Pro Ser Leu Asp Pro His Trp Asp Thr Glu Ser Glu
195 200 205

His Gly Asp Trp Cys Cys Arg His Leu Leu Thr Cys Val Leu Glu Gly
210 215 220

Leu Arg Lys Thr Arg Lys Lys Ser Met Asn Tyr Ser Met Met Ser Thr
225 230 235 240

Ile Thr Gln Gly Arg Glu Glu Asn Pro Thr Ala Phe Leu Glu Arg Leu
245 250 255

Arg Glu Ala Leu Arg Lys Arg Ala Ser Leu Ser Pro Asp Ser Ser Glu
260 265 270

Gly Gln Leu Ile Leu Lys Arg Lys Phe Ile Thr Gln Ser Ala Ala Asp
275 280 285

Ile Arg Lys Lys Leu Gln Lys Ser Ala Val Gly Pro Glu Gln Asn Leu
290 295 300

Glu Thr Leu Leu Asn Leu Ala Thr Ser Val Phe Tyr Asn Arg Asp Gln
305 310 315 320

Glu Glu Gln Ala Glu Gln Asp Lys Arg Asp Xaa Lys Lys Gly His Arg
325 330 335

Phe Ser His Asp Pro Gln Ala Ser Gly Leu Trp Arg Leu Trp Lys Arg
340 345 350

Glu Lys Leu Gly Lys Leu Asn Ala Xaa Xaa Gly Leu Leu Pro Val Arg
355 360 365

Ser Thr Arg Thr Leu Xaa Lys Arg Leu Ser Lys Xaa Lys Xaa Ala Ala
370 375 380

Pro Ser Ser Met Pro Leu Ile Ser Arg Glu Ser Leu Glu Gly Pro Leu
385 390 395 400

Pro Gln Gly Thr Lys Val Leu Xaa Val Arg Ser His Xaa Pro Asp Ser
405 410 415

Ser Ser Arg Thr
420

<210> 59 <211> 32 <212> DNA <213> Homo sapiens <400> 59

ˆaaactacaa atggttcttc aaatggagcc ca 32

<210> 60 <211> 32 <212> DNA <213> Homo sapiens <400> 60
gatgcagtcc aagatgcagt ccatgactaa ga 32

<210> 61 <211> 1740 <212> DNA <213> Homo sapiens <400> 61
aggttggtcg acaaccgctc ttaactgctt catgctgaat tggggcatag taggggtcgt 60
gcagttgaga tttccttggg aggggtgcct tcaatgtcat caacattgga gcatgggcta 120
gcaggccagt ccaggggtcc gcggtagatc ttagtcatgg actgcatctg gggctccatt 180
tgaagaacca tttgtagttt tacagcttcg attctggaag agacaaacgt aacaaggagg 240
ttaaagatac aaggattgaa atgtacggcc tgaagtgcag gggcatatga gtgtgggcgg 300
tgcaagtggg gtttccttta gaaaaactcc gatacaatag ggcatcaata tttctaggaa 360
gccacattct ccatagaagc tctcggttaag gggagctact ggtagtacag cagcatacag 420
gggggtgcagt gagagtgaag gggggtaaga gaacagtaaa aagaaaaata tgacaaggga 480
gggccaagag gatctacgat tctagttact ttcctcacgg ttgtcgctg aagagcaggc 540
gcagatcctc tagaggttca caggaatagc tagcattgtc tgctggattt tcgggttcct 600
gtggcagtat ccagggtttg gctcgagtgt gacttatcca agactccact ccagccactt 660
gactgcggtt agggtagata aaatgactgg gtagggtcct tcccaggatg tgtgtaggga 720
gggggaatta aaggggaagg gacttgacta ataccatgtc accaggggtg aataattcct 780
ttccctcctc tcagggacag gttccctgta atgttttaag aactcgttga tatttggtta 840
aggaggtgat gtctgcaact aagttggccg tctctcagtc aagcacaagg tcattgggta 900
ggaagggctg tccatacagc atctcatatg gactaagtcc tgcttttttg ggacagtttc 960
ggattcttag taaggctata ggcaacagag caggccatgc aaggtgggtt tcttgggtta 1020
gcttttttag atgtcgtttg agtgtttcat tcattttctc aacttttcct gaggatcgtg 1080
gcctccaggc acagtgtgag tgatattgta tacctaacgc ctgggatact ccctgcgtta 1140
ctgcagcctt gaaattgggg ccattgtcac tctgtaaacc tcagggaagt ccgaatctgg 1200
gaattatttc atgaattagt acttttatta cctcttgggc cttttctgtc ctacaaggga 1260
aggcctccac ccaaccagtg aaagtaccca gattagtaga tactgaaatc tctgagattt 1320
gggcatgtgg gtaaaatcta gttgctagtc ttctcctggg taatggcctg ttctttgttc 1380
tcctgaagga gcttggcaat aaggcagggg attatttctt tggcacactt cacaggccct 1440
gactatctgc ttgacagttt tgaaaaggcc tgggtccagta aataatgatt tggccatctg 1500
atgggtgctg tcaatgccta agtgaaaggc ctggtgaagg gttttaagta atttccattg 1560
gttagctgca ggcaaaaagta ttttttcttt ggtggctggc catcctgagg agaggaaact 1620

ätgtcctcgt	gagtttcccc	attccatttc	ttctgctgag	tactggagct	tggtttccca	1680
gaggggatta	ccccatacta	ggggtccttc	tgtaagcatt	tctaattggag	agtcctgcct	1740
<210> 62 <211> 7140 <212> DNA <213> Homo sapiens <400> 62						
ttggtcttaa	gaacacaaat	gatatggctc	caatgactgg	aggaacacca	gggtccttgg	60
tctcacgctg	atttagataa	aacgactgtc	aggcctctga	gccaagcta	agccatcctc	120
ccctgtgacc	tgcacgtata	catccagatg	gcctgaagta	accaaagaat	cacaaaagca	180
gtgaaaatgg	cctgttcctg	ccttaactga	tgacattcca	ccattgtgat	ttgttcctgc	240
cccatcttaa	ctgagcgatt	aaccttgtga	aattccttct	cctggctcaa	aacctcccc	300
actgagcacc	ttgtgacccc	cgccccctgcc	cctaagagaa	aacccccctt	gattataatt	360
ttccactacc	cacccaaatc	ctataaaatg	gccccacccc	tatctccctt	cgctgactcc	420
tttttcggac	tcagcccgcc	tgcacccagg	tgaaataaac	agccttgttg	ctcacacaaa	480
gcctgtttgg	tggactctct	tcacacggac	gctcatgaca	tttggtgcca	aaacctggga	540
taggaggact	ccttcaggag	accagtcctc	tgtccttgcc	ctcactctgt	gaggacatcc	600
ccctacaacc	ttgggtcctc	agaccaacca	gccaaggaa	cagctcacca	atttcaaatc	660
aggtaagcag	tcttttctact	ctcttctcca	gcctctcttg	ctacccttca	aactccctct	720
ctcactaccc	ttcaatctcc	ctgtccttcc	aattccagtt	ctttttcatc	tctagtagag	780
caaaaggaga	cacattttat	ccatggaccc	aaaactccag	caccagtcac	ggacttgggg	840
agacagtctt	cccttggtgt	ttaatcactg	cggggacgcc	tgccctgatta	ttcaccacaca	900
ctccattggt	gtctgatcac	ggtggggaca	cctgccttgg	tcactcacc	acattccctt	960
tggtggtacgt	caactgcaaa	agcaggggac	gcctgctttg	gctgctcacc	cacccccctc	1020
tctgtgtctc	tacctttctc	tttaaactta	cctccttcac	tatgggcaaa	cttctgcctt	1080
ccattcccc	ttcttctccc	ttagcctgtg	ttcttaaaaa	cctaaaacct	cttcaactca	1140
cacctgacct	aaaacctaaa	tgctttat	tcttctgcaa	cactgcgtgg	ctgcagtaca	1200
aacttgataa	tagctttaaa	tggccagaat	atggcacttt	caatttctcc	atcctacaag	1260
atctagataa	tttttgtgga	aaaatggaaa	aatggctctga	gatgcctgac	gtccaggcat	1320
tcttttacac	attggtccct	ccctagtctc	tgctcccaat	gcgactcatc	ccaaatcttt	1380
cttctttctc	tcctgtctgt	tccttcagtc	tcaccccaa	gctctgagtc	ctttgaatcc	1440
tcctttgcta	cagacccatc	tgaactctcc	cctcctcccc	aggctgctcc	tcaccaggcc	1500
gagccaggtc	ccaattcttc	ctcagcctct	gctccccac	cctataatcc	ttttatcacc	1560
tcctctctc	acactcagtc	cggcttacag	tttcgttctg	tgactagccc	tccccatct	1620
gccaacaat	ttcctcttaa	agaggtggct	ggagctaaag	gcatagtcaa	ggttaatgct	1680

ccctagggcat	ggttggatac	ttttgccttt	ggatacctgg	ttttgccatc	ctaacaaaat	3600
cattatataa	actcacaaaa	ggaaacctag	ctgaccccat	agattctaaa	tcctttcccc	3660
actcctcttt	ccatttccttg	aagacagctt	tagagactgc	tcccacacta	gctctccctg	3720
tctcatccca	acccttttca	ttacacacag	cogaagtgc	gggctgtgca	gtcgggaattc	3780
ttacacaagg	accgggacca	tgccctgtag	cctttttgtc	caaacaactt	gaccttactg	3840
tttttaggctc	gccatcatgt	ctccatgcgg	tagcttccgc	tgccctaata	cttttagagg	3900
ccctcaaaaat	cacaaactat	gctcaactca	ctctctacag	ctctcacaaac	ttccaaaatc	3960
tattttcttt	ctcacacctg	acgcatatac	tttctgctcc	cgggctcctt	cagctgtatt	4020
cactctttgt	tgagtctccc	acaattacca	ttcttcctgg	cccagacttc	aatctggcct	4080
cccacattat	tctggatacc	acacctgacc	ctgatgattg	tatgtctctg	atctacctga	4140
cattcacccc	atttccccat	atttccttct	tttctgttcc	tcatgttgat	cacatttggt	4200
ctactgacgg	cagttccacc	aggcctgac	gccactcacc	agcaaaggca	ggctatgcta	4260
ctagaatcttc	cacatccatc	attgaggcta	ctgctctgcc	cccctccact	acctctcagc	4320
ctagccgaact	gattgcctta	actcgggcct	tcactcttgc	aaagggacta	cacgtcaata	4380
ctttatactga	ctctaaatat	gccttcata	tcttgacca	ccatgctgtt	atatgggctg	4440
ctaaagaggtt	cctcactacg	caagggtcct	ccatcattaa	tgctcttcta	ataaaaaactc	4500
ctctcaaggc	tgctttactt	ccaaaggaag	ctggagtcac	acactgcaag	ggccacccaaa	4560
ctaggcgtcaga	tccattact	ctaggaaatg	cttatgctga	taaggtagct	aaagaagcac	4620
ctagcgttcc	aacttctgtc	cctcatggcc	agtttttctc	cttcccatca	gtcattccca	4680
ctactcccc	cattgaaact	tccgcctatc	aatctcttct	cacacaaggc	aaatgggttct	4740
tagaccaagg	aaaatatctc	cttcagcct	cacaggccca	ttctattctg	tcatcatttc	4800
ataacctctt	ccatgtaggt	tacaagccac	tagtccacct	cttagaacct	ctcatttccct	4860
tccatcgtgg	aaacatatcc	tcaaggaaat	cacttctcag	tgttccatct	gctattctac	4920
taccctcag	ggattgttca	ggccccctcc	cctccctaca	catcaagctc	ggggatttgc	4980
ccctgcccag	gactggcaaa	ttgactttac	tcacatgccc	tgagtcagga	aactaaaata	5040
cctcttggtc	tgggtagaca	ctgtcactgg	atgggtagag	gcctttccca	cagggtctga	5100
gaaggccact	gcagtcattt	cttcccttct	gtcagacata	attccttggg	ttggccttcc	5160
cacctctata	cagtccaata	acggagcagc	ctttattagt	caaatcacct	gagcagtttt	5220
tcaggctctt	ggtattcagt	ggaaccttcg	tacccttac	tgtcctcaat	cttcaggaaa	5280
ggtagaatgg	actaatggc	ttttaaaaac	acacccacc	aaactcagcc	tccaacttaa	5340
aaaggaggat	agagcccaaa	aactcgcaac	caagctagta	attatgctga	accccttgg	5400

gacactctcta attggatgtc ttaggtcctc ccaaattctta gtcctttaat atctgttttt 5460
 ctcttctct tattcggacc ttgtgtcttc cgtttagttt ttcaattcat acaaaaccgc 5520
 atccaggcca tcaccaatcg ttctatacaa taaatgctcc ttctaacaac cccacaatat 5580
 cgcccccttac cacaaaatct tccttcagct taatctctcc cactctaggt tcccatgccg 5640
 cccataatcc ctctcgaagc agccctgaga aacatagccc attatctctc cataccaccc 5700
 ccaaaatttt tgctgcccc acaacttcaac actatttttac attatttttc ttattaatat 5760
 aagaagacag caatgtcagg cctctgagcc caagccatca tatcccctgt gacctgcaca 5820
 tatacatcca gatggcctga agtaactgaa gaatcacaaa agaagtgaaa atggcctgtt 5880
 cctgccttaa ccgatgacat tccaccactg tgatttggtc ctgccccacc ttaactgagc 5940
 aattaacctt gggaaattcc ttctcctggc tcaaaacctc cccactgag caccttgtga 6000
 cccctgcccc tccactaccc acccaaatcc tataaaatgg cccacccca tctcccttag 6060
 ctgactcctt ttttggtc agcccgctg caccaggtg aaataaacag ccttggtgct 6120
 acacaaagc ctgtttggtg gactctcttc acagggacgg gggtgacaac aacacggaca 6180
 acatggagt ggttttaagg agcagagagt ttaatacgca aaaaagaagg aagaggctcc 6240
 cctgtacaga cacagaggga gggggctcca agccgagaga aggaaacccc atgtgcagtg 6300
 gaaaagtggg tgattatact gggaggctgg aggaggcggg gtctgatttg cacagggccc 6360
 aggggattgg gttgaccagg tgtatcatte atgtaccccg caaaaaacct ggccctccca 6420
 cctcagccct ttaatatgca aatgtgggtt gccatgatgt tctgaaaaca catgaattat 6480
 ctggaggggg ccatgacact tggtacatgt gctgacaaga agagggtggg aatcgccatg 6540
 ctggccatgt tgggtggacc tagtttttaa tagcctgcat ttgcatatca aagtttgctg 6600
 gcctggctct ttaagctgtc ttttctgtta gaaaaggaat ggtttggaat gggtgagggt 6660
 tgcttcttat tacaagaaaa tttccaaaaa cctttactct ttctagctgc caaaaaacta 6720
 tttcttaata acttatgtat taccataatt aggcagcacc aaagatccct gcaggtcaga 6780
 cactgcaat taacatgctg gctttactgc tgattatggg agctgcatcc acctagcctc 6840
 tcatattgca actgcctgac ctctgccacc ccacgagcca cttatcccca cttataatca 6900
 gccatttcg attgtaacat ctgccactta ttcccgacgt tgtggtatat cctatagatg 6960
 aattcattca acatccattc caacaccacc tctcttgccct tcctatactc tctggagagt 7020
 gaattactga gtcacatgat cttcactgca gtcattttgtg gctatgtgac atagttctgg 7080
 acagtgaaca tagacagaag tccttggggc gggcttcctt tctgggatga gggcaaacg 7140

<210> 63 <211> 44100 <212> DNA <213> Homo sapiens <400> 63
 tgcctttatt tccgtaggct ggtcatatgg cgctagcact cacataaagc taccgaggag 60

āgcgaatgaa accaaaaatca ctttaccttc acagcacgag gccgtcgtcc ctctcgatat 120
 ttggcccgtg tgtcgcatac cgccctctgg acgtggtgat caaataaaact ccctagctcc 180
 ccgcgcgtcg acgccatctt gcctactttg atcctcgcag ggaggacaac atccgcccta 240
 ctgagctccc ttttatccaa taagagagcg ggatgagtta aggagtgcca ggattggctg 300
 gagaatcgac agcgtcggcc atcgtttcct gcgtgcgaag atttgatgaa cgaggtgccg 360
 ccccgagcg gctcggcgga gaggcgcggt ggggtgacaga agctttcttg tcccaccac 420
 tacaggctta cggcaggatg cgcagcgggg agagggggcg gggccgcagg gggcggggcc 480
 gatcgatctc ctccggctcc gacgtcctcg gcctgccggg tcccgggtcc tttgcggcgc 540
 tagggtgggc gaaccagag cgacgtccg ggacgatgtg gggcagcgat cgcctggcgg 600
 gtgctggggg aggcggggcg gcagtgaact tggccttcac caacgctcgc gactgcttcc 660
 tccacctgcc gcggcgtctc gtggcccagc tgcactctgt gcaggtaacc tgccggcccc 720
 gagccacctg atcttcagcc tggggtcgga cgaggccgaa gcctctcagg gacgcggcgg 780
 gacaccggct gccaccggg cgccgcgaa gcgcgcagag atcagggtcc ctgcacggca 840
 gggcccttct gggtagtctc tggatccac aagtccagt cagccctggg ctcgtcttat 900
 ccagggtctt ttcacttggg gaaactgaac ctagaaacgt cctaatttc taccactgtt 960
 ttataaata ttccttattc caggctggaa aagctcctga gaagtggttt gtttttatta 1020
 tttaaaagg tgttttcctt gccagccatt tccagttaac ctgcgctgct gccgtccggg 1080
 ccgcgagagc gggacgcaga gttgttggcg gagccctgt cggttcccgg ggactaagca 1140
 ccgcgtccca tgagcgggaa aggttaatac aatgatggtt ctgccctgcg tcgctgacgc 1200
 ggaacacagc tgtagtgtgt taggaacaca taacgtagtt aagatcactt gaagctctgc 1260
 gatcagtcgc ccttctggac gttgtgggta ggatgtttca cagttctaac cactgggtgga 1320
 gatacagcgt ccataatttc ataattaaaa atagaggcac atggtctcac gagtttgagt 1380
 gtacttatgg gggcaaaagg acggcgtatt tgaaatcctc ataaatcctg gatgcatggt 1440
 acccaccagt ggctaatacta tgcaatgaat agagtgtgca ataatttcaa gcatcccttc 1500
 tttccacttg agttacttcc ccatacctag ggggaagatat ttttggcca ctgaaaacat 1560
 gagttcagca gaatcctcct atcatcgtcg ttattatattt ttaccactaa gtagacaatc 1620
 ttttggtttt tgatgggctt tatggctaga gacaaatcag tcaactgtcac caagttccag 1680
 gtagaagttg gttcagtgtc ctgtcagctt cgatgggatt tttcaacatg ttttcaaata 1740
 tgcacttaat agtaggaatg ctttcttaca gtaactctaa tttgatccta agatgtagtt 1800
 gttaccttac attcatcact gtttaagaat ttagtgggtc tgatctttgt tttaaatttt 1860
 gagccttcgg gaagtactta taagaattaa ttcatgcata tctttttgaa atgtaaatgt 1920

5'
 3'
 1'
 2'
 4'
 6'
 8'
 10'
 12'
 14'
 16'
 18'
 20'
 22'
 24'
 26'
 28'
 30'
 32'
 34'
 36'
 38'
 40'
 42'
 44'
 46'
 48'
 50'
 52'
 54'
 56'
 58'
 60'
 62'
 64'
 66'
 68'
 70'
 72'
 74'
 76'
 78'
 80'
 82'
 84'
 86'
 88'
 90'
 92'
 94'
 96'
 98'
 100'

cttttagccct	ggaacaaatt	gctgtttctg	ttcagcccat	attagcagaa	taggtcaact	1980
ttactttcta	attatcaatg	taataagttt	attactttat	agattccata	aatctataca	2040
tttattcctc	gatgaattat	ataaatttat	agaatttatg	ttttatagaa	aatttgga	2100
gcatggaaaa	ttattaacaa	gaaaataagt	tacccataat	cccagaactt	agaggtgact	2160
aatgttgaca	gtttggatca	aatcttccag	ttttgtttct	aatctttatt	tttaacataa	2220
atgaggtcct	gtatacacac	gtacagtttt	gtgtcctggt	gtttttat	aatgttatta	2280
tgagtgtttt	attttgttaa	aaggtcatca	ttttaagttg	ttaattagta	ttctagcaca	2340
aatttgccat	aatttattta	attgtttact	atgattgacc	atttagattg	tacttaattt	2400
ttaggcatta	gaagtgataa	actatat	aatcagacgt	tgaaaataac	acatctt	2460
ttagaaaaca	tcattttatt	tctggttg	taggatagat	tcccagaatt	cttgggttag	2520
agggcataga	taattatgaa	agcagaaaga	ttcacaagtt	gggagttaat	acttgaatta	2580
ctttatttgg	ggtgaagcat	tgagtgcata	atacagatca	tgcagtaatg	ggaagaagg	2640
ctgggaacaat	ggttttctgg	cctatgtcag	acttaccttg	aagcttttaa	gaatacagat	2700
gttctgatca	accctcagac	ctattaaatc	agacctaaaa	tcttagggaa	taggctttag	2760
gcatctctaa	ttttaaaaaa	tttattcagg	ctacttggat	gcacaaaaga	gttgagacct	2820
ctgtcctag	aatcatagaa	ttttaatgac	gatagagacc	ttaagcatct	aggtcgtttc	2880
gtactttta	catgtaagga	aactggcatt	cctaggccag	taccattgcc	atgcagctaa	2940
tttgccctct	tgtctatagc	tcactctgca	tcaccaacc	taccgttctc	actgtttctt	3000
ctataaccaa	tctccttccc	acttctgttc	tcttactcat	gccattcttc	cctcagtc	3060
tttcttcct	tccatacaaa	ttccatgtct	ttaaaaagga	ataatcctac	ctcctccaca	3120
tagctttcca	attctctgtt	gcccacattt	gtctcccttt	caatacttct	ctgttggt	3180
atgtgacaca	tcacatttga	tatactctgt	actgtgtttc	aagtattgta	ttctctt	3240
tactcaagtc	attatttcag	gactgactac	ccagtagatg	ctttaagtca	ggatttctca	3300
accttggcac	tgttgacatt	ttgagctgga	taattttttg	ttttgggggc	tctcctgtac	3360
attttaagat	gtttaacagc	acccttggcc	tctatccagt	agacgcctgt	actgcctccc	3420
cctatctgtg	acaacaaaaa	aggtcttcag	acattgtcag	atgtctactg	aaggacaaaa	3480
tcacctctgg	ttgagaacca	ccgcttcaac	taagttatct	tctctgtact	cagaacttga	3540
tgtgattgca	gcaggggggag	aggattcata	tacacagtga	atgcaaacga	acctaaatca	3600
ccattcggat	atggccacac	aattttcatt	tcccttgtgt	tagcaagaga	taccctaggc	3660
tttggaacctg	attattccta	aggcattctg	atgtatggtt	ttacctgcag	atttctggt	3720
aatactgata	cctcagtttg	ggtcaaagaa	ggtcaattaa	ttgattgatt	tgatttgact	3780

Cctggaaaag	acgctccttt	ctagctgtct	ctttcttctc	tttacctgaa	tagccagggc	3840
tctgtggttc	aagtgaagta	ttttgacata	aaaattaact	tagaacattg	gtctgcagag	3900
tttgctcaat	ataactgagc	acatattgtg	gctttatgga	gctggttact	actttttgac	3960
caaataaata	attagaagta	tttttcctcc	tcaataaggt	tcatttttcc	ttttttcagt	4020
gagctggtag	agtttccttt	tttgatattt	cagggcatct	ttcatatttc	catctcttaa	4080
gtttcttcat	atgaagtaga	atttatctgg	attatgtatt	gctgactctg	atgaaaaccc	4140
atagaaagca	tctggggctt	gatcaccttc	attcttgtaa	tagctcacac	ggttacagct	4200
gatatggtaa	cttaagactt	ttgattccaa	atctaggcaa	aatacactca	gttgaaagaa	4260
tttgtcagcc	agaacagttg	gactgttctg	tgaaaattgt	gagaaaaatt	acacaactaa	4320
gtgatacatg	atgatggctt	tcttaaatat	aaaattgtaa	taacatgggt	aatttccagt	4380
acgttatatt	gtcccagaag	tggctccaac	attgtttgaa	atttgtctca	tttaaagaaa	4440
Gataagctgg	ctatggtggc	tcacgcctgt	aatcccagca	ctttgggagg	ctgaggcagg	4500
Cagatcacct	gaggtcagga	gttcgagacc	agcctggcca	acatggtaaa	accccatctc	4560
Gactaaaaat	acaaaaatta	gccgggcatt	tggtgggggc	ctgtaatccc	agctacttgg	4620
Gaggctgagg	caggagaatt	gcttgaatct	gggaggtgga	ggttgcagtg	agccgagatt	4680
gtgccactgc	cctccagcct	gggtgacaga	gtgagtctcc	gtctcaagaa	aaaaaaaaaa	4740
Gaaagcaaga	aacataaaga	ctgggcatgt	tggctcatgc	ctgtaatccc	agcactttga	4800
Gagactgagg	tgggaagatc	acttgagccc	aggagggttaa	ggctgcagtg	agccgtgatt	4860
tgccactgt	actcgagcct	gggcaacaca	gtgagatcct	gtctcaggaa	aaaaaaaatt	4920
Gcatgtaaat	gaatgaattt	gatatttaat	attttaaatt	atgaaaactg	ttctgtagag	4980
atgtagatct	tgccatgttg	cccaggctgg	ctttgaactt	ctgggctcaa	acaatcctcc	5040
tgtctcagtc	tcccaaagta	taaagattac	acatgtgagc	cactgcacct	ggcctaatat	5100
ttttaactta	atgaatttat	tttgatataa	ataaattaat	aacactgaag	cttcctgata	5160
taataagtct	ttttgtgtgt	gtgacgggtt	ctcactctgt	tgcccagact	ggagtgtaat	5220
ggcactatca	tggtcactg	tagcctcaac	ctccctgact	caagtgatcc	tcccacctcg	5280
gcttcctgag	tagatgggac	cacaggcgta	tgccaccaca	cctggctgat	ttttaaaatt	5340
tattattgat	acatattaat	aaaattattt	ttattttaaa	aatgatatat	gtggctgggc	5400
atggtggctc	atgcctgtaa	tcccgacagt	ttgggaggcc	gagggtgggag	gatcacttga	5460
gaccaggagc	ttaagaccag	cctaagcaac	atagtgagat	cccatctcta	tagaaaaaaa	5520
aaatggctag	gtgtgggtgt	gtatgcctat	attcccagct	actcaggaga	ctgaggtgag	5580
aggattgcta	gagcccagga	gtttcaagtt	acagtgacct	atgattgtgc	cagtgcactc	5640

Cagcctgggc	aacagagcaa	aatcctgtct	caaaaaaaaa	aaaagttcga	aatgcttat	5700
gatgcaatat	aagtagtgga	aaaggatatt	aaattgtgcc	tatatgaaca	caactatatg	5760
aaaaacttgc	acatagagaa	aaggattaac	aagaaataga	ccaaattggt	cacatgggtg	5820
tcttgtttgt	ggagagaata	tcagtagttc	atttgtttcc	ttccaagttt	atatgttttc	5880
cgaggtctct	ataatgagtt	tgtaattggt	taatcataga	aaaccctttt	ttggtccttg	5940
gccacaaaact	tacatgtttt	aatgtaattg	ctttttttaat	gagaataaat	gttataattt	6000
gcttttttaa	aacctatatt	cccatagtta	tatgagccct	tacaattatt	aagaggctgc	6060
ataatataac	gtttctggaa	gggtacagaa	gaaacagcag	taattacctc	tgagaacaga	6120
gacatggcct	cacattttac	ccttttgtag	gttttgtagt	tttgccacat	gcatttatta	6180
ttcttccaat	aaataagtaa	ataaatatgg	attgtatact	ccatctgggt	ggtgtttcat	6240
aattctaaaa	ttatattgct	acatttttta	agatgatatg	tgtttctact	tattaacgta	6300
atgtttaaaa	tagtaaattt	atatcttatt	taataatttc	cctattgata	gacatttaag	6360
atagttctca	gtgttcacta	tcatagaaaa	tactgcacag	atagcttttg	ctatagtttc	6420
ttttttcttt	gaatcgttaa	ttgggaataa	atgctcaaat	agttatatgt	ggctcaactg	6480
ttattttaagt	ttattgactg	actgctgcca	ttttgaattc	tgaagggggt	gattaaattt	6540
ataatgctgc	cataagaata	taagggtatt	ggcttcatta	gcattccacca	gcattgggtg	6600
ttggaaatga	ttatagattt	ttaaatgcta	caacaaatgt	agataacaga	gaactatcta	6660
ttagaactctt	tttgacatg	tgaattgtaa	taatagttta	ttttcatgtg	aatccagaaa	6720
atgtatacgt	aaaacctttt	ttcctctcat	ttcttatatg	aatagaatca	agctatagaa	6780
ttgggtctgga	gtcaccagcc	tgcatctctg	agctgggtgg	aaggcaggca	tttttagtgat	6840
gggggacagg	taagcacatg	tgatggcaat	aactttcttc	taatatcaca	taatatagca	6900
atagaaataa	aattaaaagt	ttagattttt	tgttaaagga	ggtgagatgt	cacctaat	6960
gtatgctatt	atgtaactag	tctaggatat	tgaagctgac	tatactctgt	ttttaggtca	7020
ttatcttgta	gtttaccata	ctccctactt	gcttcttatt	ctactattta	actcattttc	7080
cacatccccct	aatttttggt	tcatgaaatt	atttttcctt	ctgaattact	aggttctact	7140
tactattatt	aaactttatt	tctgacatat	tttataacct	tccatggtct	cacttgatta	7200
aaaataaaaa	attcagctgg	gtgcggtggc	tcacacctat	aatcccagca	ctttgggagg	7260
ccaagggtggg	cggataattt	gaggctcagga	gttgagagacc	agcctgcca	acgtggtgaa	7320
acccccctc	tctactaaaa	attcaaaaat	tagctgggca	tggtggcagg	tgctgttaat	7380
cccagctact	caggaggctg	aggcaggaga	attgcttgaa	cctgggagggt	ggagggttga	7440
gtgagctgag	attgcactgc	tgacttcag	ctgggtgaca	agagcgaaac	aatgtcttga	7500

aaaaaaataa	aaaataaaaa	attctacaac	acagggttat	tatTTTTcca	TTTTgtttt	7560
cccttatgag	tttaatatgt	ttagattata	aacctgaaag	cttgaatacc	tatgtctatc	7620
TTTTgttttc	ttatgtttat	caagttattc	ctTTaaacat	tttctaaact	gtaagaataa	7680
tgtgaggctg	ggctcaatgg	cttatgcctg	taatcccagt	gctttgggag	gccaaggtgg	7740
gaggaccact	tgaggccacg	agttcaagat	tagcctggct	aggcaacata	gcaagaccct	7800
atctctataa	aaaaattaaa	aaaattagct	gggcatggta	gcaaagtctt	gtagtcccag	7860
ctactcagca	gactgaggta	ggaggaatgc	ttgagaccag	gaatttgagt	gacctatgat	7920
tatgcactcc	agcccgggca	atagcaagac	cctatctctt	aaaagaagaa	gatgtagtaa	7980
taatacatat	tcattataac	tatTTTacca	ttgaaagtaa	aaaatgagtt	TTTaccTTTT	8040
cccagtccca	tcctcagaat	ggggatctca	gtagaccttt	aggattggaa	gaatgagatc	8100
attcatatTT	tctgcaatta	ttaccccaca	aaatatTTca	gatacctTtc	catgtattac	8160
aaacaatgtg	cattttaacat	gtctctctct	ttctctctct	ctctgtgtgc	gtcttcatga	8220
tctctgtttg	cagccctgcc	agtaagacac	tatctcctga	agaatcactg	ataggaacag	8280
aaagtggact	ggctaggcca	ggagtcctta	gcttcttagg	gggcaggagc	tgctttgtgc	8340
tttctcagaa	tcagatatat	atgtggactg	aaacatttaa	aaacagaata	gccaaggggtg	8400
ctatacgTTT	aaaacttata	tagatggggc	tacattgctc	tctattacta	atttcccatg	8460
acaatacacg	agagtgccat	gtctTTTTaa	cttgTTTTga	gcacagacta	atcttgTTTTa	8520
TgcattgTTTT	ttgatgagaa	taggctactc	atgagaaatc	tgtaaaccta	acactagtcc	8580
cttgcatact	ctaaaattgtt	gctagaatct	taaaattTTa	gcaccagacg	gaccttagaa	8640
atcattaact	ttggtgcttt	gttctacaat	acaaggagat	ggaatatTTT	acctcaggatt	8700
gcttagcagg	ttacagttct	gccctctgag	taccagcac	ttccctgtgg	gcaacatcaa	8760
cttcttgatt	ttcaagtctt	aattagtact	ctgaagaatc	ctacttgTTT	TTaactccca	8820
TTtgctTTga	agtgactTTa	cctgattTTT	ttagatccct	tattgcagca	atgccactaa	8880
gaaactgagt	ctctagcttc	ttggtgggca	ggagctgctt	tgtgcttgct	cagaatcatc	8940
ctTTtcagta	agggagatat	tgaagagaaa	tctactgagg	agtctggggg	tgaggcactc	9000
agggaaatcc	tgctccagtc	cacaaaagca	gagaggaagg	gttggttacc	tagagtatTT	9060
aacatgcaga	ggctTTggat	TTtactcctt	taatccttg	aatgcctat	ggaaggggaa	9120
aggaagtaag	atggtgactc	cagcttatag	acatactagt	gttacatata	TTTaaactat	9180
aataggaggg	tattattagt	TTtacttaac	TTTcaactgt	gaaggattat	acttctcaat	9240
atttgtctcc	agtgtctatt	tcagtgtatt	TTTcactTTT	cttgaagcag	catgtctgtt	9300
gcaaaacttc	tagaaataat	gagaatatTT	atatattaga	tcaagccata	acttgatgat	9360

atagtcattt	cttcttatat	tttttactta	cattttttaca	ttttaatgat	tacttttcatt	9420
tttgaaaaac	atgtcatgct	gagatgtatt	tttcttcatt	ctgtaattag	ttatgaaaca	9480
gttttttccta	aaatgctgag	tatatcaagt	cttgggctaag	aataagtaat	aaatatattgc	9540
cacatgaaag	actacacata	tagccagggtg	cagtggccttg	cacctgtttt	cccagctacc	9600
caggaggctg	aggcaggagg	attgcttgag	cccagggttt	ccaggctgca	gtgaactatg	9660
attgtaccac	tctactccag	aatgggtgac	agagccaggc	cccatctctc	aaaacagaaa	9720
agaaagatta	catagactac	atatacaccc	ccatccaaaa	catacacaca	catctactta	9780
acctaaaatg	gtaagaagat	aacttcttat	tttctaatat	atgacacaga	aaagtttttt	9840
taaagtagtt	ttaaattttt	aattttttct	aggatatttct	caagccatgt	tcccatgtgg	9900
tatcttgtca	acaagttgag	gtggaacccc	tctcagcaga	tgattgggag	atactggtaa	9960
agaaaacca	ataagaacta	tctcatttaa	ggttaaatta	cttcacaata	tcaatgtctt	10020
tgagctttctc	taagctttat	tatatattct	gagttgggtt	tgaattataa	gaatgaattg	10080
gggccaggca	cagtagctca	tgcttatagt	cccagcactt	tgggaggcca	aggcagggtg	10140
atgtgcttgag	tccaggagtt	caagaccagg	ctgggcaaca	tggtgaaacc	ccgtatctac	10200
taaaaaataca	aaaattagcc	aggcatggta	gtgcatgcc	ttagtcccag	tcacttggga	10260
ggctgaggca	ggagaatcgc	ttgagcccg	aaagtcaagg	ctgcagtgag	tcaggatctt	10320
gcattgtac	tccagtctgg	aaaacagagt	gagaccttgt	ctcaaataaa	aaaagaatga	10380
attgatagag	atctaattga	caacctgaca	actataggta	ataaaattgt	attggggatt	10440
atgtttaaat	gagtagattt	taactactct	taccacaaaa	acacaaaagt	gggtaactgt	10500
gagatgatgt	atatgttaat	ttacttcact	atagtaacca	ttatactatc	tatatgtagc	10560
tcataacacc	atgtcgtgta	tattaaatat	gcacattaaa	atttgttttt	taaaaaaaga	10620
attgagattt	tttttaacta	gatatggagt	ggacaaaatg	taaagtgaat	tgatcttttc	10680
gtctgttggt	tctaggagct	gcatgctggt	tcccttgaac	aacatcttct	agatcaaatt	10740
cgaatagttt	ttccaaaagc	catttttctt	gtttgggttg	atcaacaaac	gtacatattt	10800
atccaaattg	gtaggtgcta	ttgtaatat	tgctgtcata	ttctacacta	tagcattgag	10860
tccaaagtag	aaatgaatgt	gcactaatga	gctttatttt	ctacacagtt	gcactaatac	10920
cagctgcctc	ttatggaagg	ctggaaactg	acaccaaact	ccttattcag	ccaaagacac	10980
gccgagccaa	agagaataca	ttttcaaaag	ctgatgctga	atataaaaaa	cttcatagtt	11040
atggaagaga	ccagaaagga	atgatgaaag	aacttcaaac	caagcaactt	cagtcaaata	11100
ctgtgggaat	cactgaatct	aatgaaaacg	agtcagagat	tccagttgac	tcatcatcag	11160
tagcaagttt	atggactatg	ataggaagca	ttttttcctt	tcaatctgag	aagaaacaag	11220

agacatcttg gggtttaact gaaatcaatg cattcaaaaa tatgcagtca aaggttgttc 11280
 ctctagacaa tattttcaga gtatgcaa at ctcaacctcc tagtatatat aacgcgtcag 11340
 caacctctgt ttttcataaa cactgtgccca ttcatgtatt tccatgggac caggaatatt 11400
 ttgatgtaga gcccagcttt actgtgacat atggaaagct agttaagcta ctttctccaa 11460
 agcaacagca aagtaaaaca aaacaaaatg tgttatcacc tgaaaaagag aagcagatgt 11520
 cagagccact agatcaaaaa aaaattaggt cagatcataa tgaagaagat gagaaggcct 11580
 gtgtgctaca agtagtctgg aatggacttg aagaattgaa caatgccatc aaatatacca 11640
 aaaatgtaga agttctccat cttgggaaag tctgggtag tataaatttt ataacttggg 11700
 agaaatttta tgtggcttaa acatccccc aaattatgaatt agaatagtat ttcatatata 11760
 aattgaaaat caattaaaaa gaaacacagt gcctaaaggc acttggggga cacatttacg 11820
 ctttgcagta aagtccttgt ttggataaag attgtatgtt ttctggccaa gtaagcttga 11880
 ataggtacaa gcttagatag gttcaggcca gagaggtcaa aattacttgc ctgagattgc 11940
 atagctagt ttacaactag gattcaaacc caggcagatt gacttggggg ttcatcagga 12000
 ggagtgccc tacaaagcct cccatcttta atgcttgagc atttgttccc cagttaccga 12060
 gcaacttg ttaatatag ggaaaagggc cagtgtaggg agagatccat ggcattgaggt 12120
 accttccctg ctgcatgtgg tggcacctgg atttgaatgc atccaggagc tgcttaccct 12180
 ccggtgtct gctctttaat ttgtgtataa cggagaggaa gtagacaggg caactagtgc 12240
 ccagccct catcctggcc acaaatatta atgctacctt tatatgacat aagtcactag 12300
 ccatttatt ggaacctaaa tttgaaccac tgtaaagtaa gacttcatag tgataaagag 12360
 aggaacttgt taggaaagag aataaaatag aaagagaagg ttgtctcctt ttgtagattt 12420
 tttttttttc tccaacagtt ttacctgtga cttttataca aataactgac aaagcattaa 12480
 tctctttggc ctacatcatt ttcttttcta tttttttttt ccacaagatg gagtttctact 12540
 cttcttgccc aagctggagt gcagtggcat gatctggctc actgcaacct ccgcctccca 12600
 cgttcaagtg gttctcctgc ctacgcctcc tgagtagctg ggactacagg catgcaccac 12660
 cacgcctggc taattttttg tatttttagt agaaactggg tttcaccatg ttagccagcc 12720
 tggctctggaa ctctgacct caggtgatct gcctgcctcg gcctcccaa gtgctgggat 12780
 tacaggcatg agccactgct cctggccggc ctacatcatt ttctaaagct ccagaccatt 12840
 cttttctttt cttttctttt cttttctttt cttttctttt cttttctttt cttttttctc 12900
 ttctcttctc ttctcttctc ttctcttctc ttctcttctc ttttctttt tttttttgag 12960
 ttagaagctt gctttgttgc ccaggctgga gtgcagtggc accacctcca ctactacaa 13020
 cctccacctc ccagggtcaa atgattctcc tgctcagcc ttcagagtag ctgggactac 13080

āagtgtgcgc caccactcct ggctaatttt tgtattttta gtagggacga ggtttcacca 13140
 tgttggccag gctagtcttg aactcctggg ctcaagtgat ccgcctgcct cagtctccca 13200
 aggtgctggg attacaggcg tgagccactg tgccctggcct cagatcatta ttttctgtta 13260
 gctttaaact gtccgttcag gagatcccac tgcctcctca aattcaaaat atctaact 13320
 gagcttatga tttagctggg tctgtcatta gatgggaata tccttttatt tccttgaaat 13380
 tatatgggta gaacagggag aagtgtgat ggtaaagtcc tgtgattaag atagcaataa 13440
 ggactccgcc cttcccactc cactgaagggt tgaagagcca tggacaatga gaagtcacag 13500
 taggtgaaat caggtactaa aatggacttg gcttgagaga tcaaaattga tcacttggtg 13560
 atacaactaa caaattcatg ttaacttgaa cctttattac cctgtgaagc atggtgatta 13620
 aaaaaaaca acaaacaaac aggaaacttg attgttaaatt tctctttaag tcagaatatg 13680
 taccttagag tttttattta tgcttttgtc taccattaat atgtctgcac ctgctcttta 13740
 gaagttaata gagagtaaag tcgtctttat gtctttcagt gcttacttat atttgggaag 13800
 ttgagaaaaa tttttaacat cattattgat atatatatat atatatatat atatatatat 13860
 atatatatat atatatatat atagataatt tttttttttt tcttgagacg gagtctcact 13920
 ctgtcgccca ggccggagtg tgggtggcgat ctccactcaa tgcaagctct gcctcccagg 13980
 ttcaagcgat tctcttgctc cagcctcccg agtagctagg atacaggctc ccaccaccac 14040
 gcctggctaa tttttgtagt tttagtagag acgaggtttc accatattgg ccacgctggg 14100
 ttcaaactcc tgacctgtg atccgcccac ctcggcctcc caaagtgtg ggattacagg 14160
 cgtgagccac tgcgcccggc tgaggtaaaa tttaaagtgt acaattcagt catttttagt 14220
 atatttatac tagttgtaca gccatcacca caatctaagt ttagaacatt ttcattaggg 14280
 ggtgggagaa attttactct gctttttaga ttaagtttct gtctggatct aatcatttaa 14340
 tcagacaatc aggagattg tctgtgatta gttttggcca ttccagcttc ttcattgggt 14400
 gttaactttc acaaataaag gctgctcaaa gattagaaat aacatttaat ttgaatgtaa 14460
 atgtgccata gtttaaaaga tgggtttggg gaatacagtc aaatacatac atttaaagct 14520
 ctaattctga agattatgta aagaaaagga aagaaatgta gggagaggat tgaaatgttc 14580
 atggtataac aatatctgaa catccatctg gtcacaccgt tggatattga atgttttgtc 14640
 ctctcaaatt tcatatgtcg aaatcccaac tcccagggtg atcgtattag gaggtgtggg 14700
 ctttgggaag tgattaggtc atgaagggtga agccttcagt aatgggattc gtgctcttat 14760
 aaaagagaac tgtgagaaat aagtttctgt cgtttgtag ccaccagtt taggatattt 14820
 tgatatagca gcctgcatgg actgagacaa ctatgagtta ttatgatagc ttctgttatt 14880
 tcacctaaat tcatagaagc taatatatca atatttatgc tatgaaatat ttcttaacca 14940

agctttgaat atatttatat ttttgtttat ttttaaattt cagattccag atgacctgag 15000
 gaagagacta aatatagaaa tgcattgccgt agtcaggata actccagtgg aagttacccc 15060
 taaaattcca agatctctaa agttacaacc tagagagaat ttagtgagtt caaatatata 15120
 tgttacatca aaattctttt acacgttttg taagatttct agttgcttta gctaagtaat 15180
 aagaatgttg tattcctttt tgatacaaat ctttttttat tgtgttaaac tatatataac 15240
 ataaaatatg ccatgttcgc cattttttaag tgtataattc aaaggcatta attacattca 15300
 taatattgta caaccatcac cactatctat atccagaact tttccatcac cccaaagaga 15360
 aacttggtac ccattaaaca ataattcccc gtccactcct ttccccagtc cctggtaatc 15420
 tctaattgat attgtgtctc tatgaattta ctatttctag atatttcata tataagtaga 15480
 agtatgcatt tgtcttatgt atctgactta tttcatttaa cataatgttt tcaaggctca 15540
 tctgtgttgt atgtatcaga atgttattcc ttttcatggc tgaatactat tccattgact 15600
 gcatatacca catttgttta tccattcatc tgttgatgga cacttgggtt gtttccacat 15660
 cttggctgc tgtgaataat gctacagtga acattgggtg acaagtatct gtttgagttc 15720
 ctttttcag ctcccttggg atatacctag gaattatgtt taactttttg agaagctgag 15780
 catctttta taaatgataa cacaataact tatatttgcc aatgcaaata tgaatatttt 15840
 ggcttttta gagattgatc attttgccac gtggttgtaa ttaaaaaaaaa ttgtcccatg 15900
 agtttcagt attaataattg tagcctaaaa gagtgctaga ctgttttact ttttactcag 15960
 ttaattcttt ggatactggg agagtcagga aatgagatat tgaacttaaa gatctttgca 16020
 gtgggggtcc agtggctcac acctgtaatc ctagcacttt gggaagctga ggtgggagga 16080
 agcttgagg ccaagagttt gagaatagcc tgggcaacat agcaagacc catctctaca 16140
 aaaaaattaa aaaaaaatt aagccaggcg tggtagctca cgcctgttat cccaacactt 16200
 cgggaggctg agatgggtgg atcacttgag gtcaggagtt ggagaccagc ctggccaaca 16260
 tggtgaaacc ccatctctac taaaaatacc aaaattatcg gggcgtggtg ctaatcctgt 16320
 aatctcagct actcaggagg ctgaggcagg agaaccactt gaactgagga ggtggaagtt 16380
 gcagtgagcc tagatctcac cactgcactc cagcctgggt aacagagcga gactctattt 16440
 caaaaaaagt aaaaataaaa attagacaca tgtgggtggca catgcctgta gtcctagcta 16500
 ctcaggaggc tgactgaagt gggaggatct cttgagccca ggagttccac actgcagtga 16560
 gctatgattg tgccactgca ctccagccta ggcaatatct caaaaaaat ttttttaaat 16620
 agattattag gccagacgtg gtggctcatg ccagtaatcc cagcactttg gaaggccaag 16680
 gcaggcggat cacctgaggc caggagtttg agaccagcct ggccaacatg gtgaaacccc 16740
 atgtctacca aaaatacaaa aattagctgc aatgtctata atcccagcta cttgggagcc 16800

Tgaggcaagc gaatcgcttg aaccgaggag gcagaggttg cagtgagtgg agactgcgcc 16860
 actgcactcc agcctgggag atacagcgag attctgtctc aaagaaaaag gaatttgttt 16920
 tcctgtcttt atcgtagagg gaggaaggag agaatggggt tggaatgggt attgagttag 16980
 ccacattatg gtagatgtat cactgggcat agagaaaagg agcatttaaa acttttccgc 17040
 ctaacagatg tttcttcagg ctacactgca ctcatgtgac taactgtaat gtcaaattcc 17100
 agacctgtgc ctatagaaca tgaacatcct tcattggatt tgtttggtca ggcttacact 17160
 ttattaggaa gatcagatgt taaaataagg gtgttaagg taagttcaga tatgaggata 17220
 attcattact attccttttt ctggcagcct aaagacataa gtgaagaaga cataaaaact 17280
 gtattttatt catggctaca gcagtctact accaccatgc ttcctttggt aatatcagag 17340
 gaagaattta ttaagctgga aactaaagat ggtgagtaca tttgttattt tgactttttt 17400
 ttctatttaa atagttgtac atttttaatt gttcttgcaa cctgtcatac ctgtgaacag 17460
 tatgtgaata gtgaaatata attatgataa ttaaacagta gtttttatgt attgaaaaat 17520
 acttttgcc gggtgcagt gctcatgcct gtaatcccag cactttggga ggccgaggca 17580
 ggcggatcac ttgaggccag gagttcgaga gcagcctgcc aacatggcgc aaccctatct 17640
 ctacaaaaaa atacaaaat tagcctgaca tagtggtgta tgcctgtagt cccagctact 17700
 tgggaggctg aggcagaagg atcacttgag cccaggaggt ctgtgttcct gccactgcac 17760
 gcagcctgg gcagcagagt gagaccctgt tggggggaaa aaaaaaaaag tctttaactt 17820
 aaataaattt gacatttaaa atcttaaatt atttcatctc tgtttcagta ctaactctgc 17880
 atttattact ttctttttta taggactgaa ggaattttct ctgagtatag ttcattcttg 17940
 gaaaaaagaa aaagataaaa atatttttct gttgagtccc aatttgctgc agaagactac 18000
 aatacaagta atagcatgtt attgaatatt taataaaata ctatttgta catatgattg 18060
 ataataaagt atgaagttcc ttgtaacacc ttgcattgtg aagtgtatta aaaacctgct 18120
 aagagtaagg aataacttga tttaaaatat tttattctgt aatctcttta aattatctgt 18180
 acaaattatt gacttaacct aaatttaaaa atgaatgcct tagcacaatt aagttccaag 18240
 aatagagttg atcatgttaa ctggtaaagt gatcatgatt taaaattctt ctaggattga 18300
 aacaaatgaa aacgtagttt taagggtttg attttttaaa ttcctatttt tacatgcaat 18360
 tttactgcac aacctatctt attttgacag ttcttaaat cgcaactctt cagaaatatt 18420
 atcagatcac ttttctttgc ttccataagt ttttttatta ttatattatt attttttttt 18480
 tttaaaagac ggtgtctcac tttgtcgccc aggctggagt gcagtggcat gatcatggct 18540
 cactgcagcc tcgacctcc aggctcaggt gattctccca cctcagcctc ccaagtagct 18600
 gggaccacag gcgaatgcca tgatgcctgg ctaatttttg tatgttttgt agagataggg 18660

18720 ttccaccatg ttgccagaa ttgtcttgaa ctctggggtt caagcagttg ttctgccttg
 18780 cccacccaaa gttgtgggat tacaagtgtg agccactgcg cccagctatt ctagaagtat
 18840 ttttaagagtc atctttttttt tttttttgag atggagtcctc actctgtcac ccaggctgga
 18900 gtgcagtggc acactctcgg ctactgcaa cctccacctc ctgggttcaa gtgattctcc
 18960 tgcctcagct tccctagtag ctaggattac aggcgcatgc caccatgccc tgctattttt
 19020 tgtagtttta gtagagacga gatttcacca tgttggccag gctgctcttg aactcctgac
 19080 ctcaagtgat ctgccctcct cagcctccca aagtgcctggg attctaagtg taaaccacca
 19140 caccagcca agagtggctt ttttacaata ttattttttg attaggacat tcattcttgt
 19200 cataaaattg aagatactct agtcatttag aatttcattg ttttggaact agacattggt
 19260 tctttattttt tgaaatgtta ttgaaggaat accatttgga gaagatacaa atgtaagaat
 19320 tgtgaaaagg ataattgtga cacaaatcaa aattatagat aaaaatatac ctgtaaaatg
 19380 tattaaggca ataacattct ttctgcttgt tgaccataaa tatttatatt ccctggatgg
 19440 ttaacattgtt attgtcaagg gtgtttaaat aatgatcttg catgcataat ttattctctc
 19500 tggataaca gaatcagcaa tttagttttc tgggacccga gaaaacatg caaaagacat
 19560 tttttgaaat gtaaaactga tttttccttg caactgtagg tccttctaga tcctatggta
 19620 taagaagaaa acagtgagga aattgacttt attcttcctt ttttaaagct gagctctttg
 19680 tggtaagaag ttatggccaa actagcatgt tagacatgtt ttaacacta tatctggcag
 19740 agttttcaat gtaaatatta aagtagatgt taatgtcaat aagtgatctt aataatgcat
 19800 ttagtagatat tttttcaagg attgtctcta tcttcacgcc tagcttataa tttgccttgt
 19860 tctctttttt tttttctctt tatttttatg tttttatcca tccctgggtg taggggataa
 19920 ccttgtcttc ttcgataaca agaagtctga agcttattag aaattttact ttgagaattg
 19980 atcgatgaga agaaagcaac tagatatcac gtggatcata tatgcttgaa taaaacaata
 20040 attcttagaa caaataaata ctttttaaaa gttaaagcca aaaacattag ttgaatgttt
 20100 aaaaatattt caaattaagt ttttccttca ctgtcttgta ttactgtaat aatttggatt
 20160 atttgtgttt ttctcaactt taaaacaaa tttttaaaaa attcctcttt tgattaagta
 20220 gggctagata aaatataaaa aatatttttt aaactcctct taatttccat atttcttata
 20280 taatatgaga atctcttata aacactacct cttagaagtc tccacagaag ctttggtaga
 20340 tgtagtagta gggatttgat ttcttagaat ggtataatct gtaaagtgtt tagtaaaagg
 20400 attaaacgat aaagtcaaaa tgtttatagc acagtgttta ttaatataaa ataaaatctc
 20460 tttttttttt tttgagatgg actctcactt tgtcactcag gctggagtgc agtggtgcaa
 20520 tctcagctca ttgcaacctc cgctcctggg gttcaagcaa tccttcgca tcagcctcct

aagtagctgg gattacaagc atgcaccacc acacctgcct aatTTTTTgt atTTTTtagta 20580
 gagatgggggt ttcacatgt tggccaggct ggtctcaagt gatccgcctg cctcagcctc 20640
 ccaaagtgtt gggattacag gcgtgaacca ctgtgccag cataaagtaa aatctcttca 20700
 gactctcatg tgatcatgta aagtggcagg cagtcacagt caagaagtag tttaaagttc 20760
 atgtttgtaa aatataatct acagattgat actggatttc ataggtaatg tttaaagaaa 20820
 aataagtttt tagttatcct cagtacttca aaagcaccca tttatgatta tgttgattac 20880
 taaactaaat catttggggg ctagagggtgt ttttttatgt gttaagattc cttaaggagt 20940
 tctattaggg caaaactttt agtaactgca tattttaaaa gtaataaaac taattttaaa 21000
 agcttgagg ctgggcgcgg tggctcacac ctgtaattcc agcactttgg gaggccaagg 21060
 cgggtggatc acttgaggctc aggagtttga gacgagcctg agcaacatgg tgaaaccttg 21120
 tctctactaa aaatacagaa attagccagg tgtggtggtg ggcacctgta atcccagcta 21180
 ctccgggaggc taaggcagga gaattgctcg aacttgggag gcagagggtg cagtgagccg 21240
 agatcatgcc actgcactcc agcctgggtg acagagcaag actccgtctc aaaaaaaaaa 21300
 aaaaaaaaaa gcttgaagtc agattcgaca ttaatcagta tactttctct caagtagggg 21360
 acaattttcta agattttagt cttttaaaat ttattaacta gtctgagcat ggtggcttgt 21420
 gctctataatc ccagcacttt gtggggccga ggcagatgga tcacttgagc ccaggagtgt 21480
 gagactagcc tgggcaacat ggcaaaaccc cgtctctaca acaaatgcac acacaaaaaa 21540
 cccaatcagc tgggtgtggt gttacactcc tgaagtccca gctactcggg aggctgaggc 21600
 gagaggatca cctttgccag ggcgtttgag gctgcaggga gctgggttca caccactgcg 21660
 cccagcctg gatgacacag caagcccctt tctcaaaaaa aaaaagataa aaaattaaat 21720
 taaattaat aactacactg ggaaggcaaa attcagcatt tttttatagc taaattttat 21780
 cctgcttcag tcttttatca tgtaactatg tatatttttt acagaggagt gaattcctta 21840
 ggcgtatcct ccttgaggca catcactcac agcctcctgg gacgcccttt gtctcggcag 21900
 ctgatgtctc ttgttgagg acttaggaat ggagctcttt tactcacagg aggaaaggta 21960
 agtggttaag gtgtgttcat tttctgttaa catttaataa cttttcattt atctttcttt 22020
 gggttttgac catctattat atagggtggg ttttgaccat ctattatata gggtttatac 22080
 gacatatgga aagcattcat ttattcacta atatttctgt gtgtctgctt ttaggtgttg 22140
 ggggagtgat gacgaataag actgatgttc tccatgccct tttctgtgt cagttgatac 22200
 aattatatgg tttttctttt ttaggctatt aggtgttgat agggttgagt aacttacaaa 22260
 tgttgaacca gccttgcata cctgtgataa ataccacgta gttgtggtgt atcattcttt 22320
 ctacattgct gagttttatc tgctaattgt ctgttgagct tttgtccatt taagtttgaa 22380

ägtgattagt ttgcagtttt ctgtttttgt gttgtctttg tctggttttg ctatccgtgt 22440
 aaatctggcc tcataaaatg agatgggaag tattctctcc tcttcttttg tttttttgga 22500
 agaggttgta taaaattgag gctgaatctt ggtggttgcc acaatgacag gaactatttc 22560
 tgtgactgaa tatattggga attcctataa agcaattatt ttctagggaa gtggaaaatc 22620
 aacttttagcc aaagcaatct gtaaagaagc atttgacaaa ctggatgccc atgtggagag 22680
 agttgactgt aaagctttac gaggtatgag tatggtaaca ctctatataa atcccttttt 22740
 cattagaaag acaggaatgt tatacataat gctgtcaatc taataaatac acatatcatc 22800
 tagtctttta cttttctgtt tatcatttag tcattaaaat ttctttggct ttctaattgt 22860
 tttgataaaa tttctaaaac tctccatatt taatggaggc ctattttttt ttctagccag 22920
 aactttttgt agactacatt tctggaagtg ctactgaca ccactctgaa aaattagtag 22980
 ttagaatata ctctaattgg tataaatgat ctctgaattg ctatggaaaa ctgggagaat 23040
 gttgcttca ggggagagaa agtaggaggc tgtggacagc aatgaggaga attacagttc 23100
 ccatataac acttttgtac ttttaaagtc cttaacattt acattattat ctattcaatt 23160
 aaaaaatatt gggaagattt tactttgaac agttaatttt tccccatgg gtaccgctgt 23220
 ctatagttc caactaatca tgaacttggtg tatttcctgt tctttgtaa tttaaacttt 23280
 gtaactcacc aggaagtttg aagccaaatt tgtgtttcaa atatagcaac tccaggatct 23340
 ctaggcagat gcatttgcatt ttgattttta atgaatcttg atcccttact ctacttatg 23400
 ttttcccaca tctactttt tttattttgt tgtaagccat ctaaaattct caatgggatg 23460
 tttactgggtg taaatgaata catgcataca ggaattatag tagcatattc cttttctttt 23520
 ttcttttttt ttttttttga gacagagtct tgctctgtag cccaggctgg agtgcagtgg 23580
 tgcgatctcg gctcactata gcctccacct cccaggttca agcaattctc gtgcctcaac 23640
 ctcccgagta attgggacta caggtgcatg ccaccacacc tggctaattt ttgtattttt 23700
 tagtagagat ggggtttcac catgttggtc aggtgatct caaactcctg acctcaaagt 23760
 gatctgctg ccttggtttc ccaaagtgt gggattacta gcataagcca ctgcacctgg 23820
 cctccttttc tgagttttat aaaatttgat actttactgc acgctttgag actgtattaa 23880
 ttgaaccatg ttgatgaaca agttttttgt atgggtatat taataaaata tagatcaaata 23940
 ttttatagtt aaatcaatat cgagcttttc tagtgctttc aaaaggacaa cctgaatttt 24000
 cccagcactg aaatgatact gaaaccattt catatcttct gtattaagga aaaaggcttg 24060
 aaaacataca aaaaacccta gaggtggctt tctcagaggc agtgtggatg cagccatctg 24120
 ttgtcctgct ggatgacctt gacctcattg ctggactgcc tgctgtcccg gaacatgagc 24180
 acagtctga tgcggtgcag agccagcggc ttgtcatgg taaatgcac caccactggc 24240

ttaaggtcctt	gttcttttgt	cagtcagcat	ttttagtcctt	aacaataaat	ctactctctt	24300
cagagaataa	tatatgtgtt	atgttaagtg	ttgtgtttga	ggcccctgat	ggcattctac	24360
agttgtccta	tagactgtaa	tagcaaaatt	ggtagagtaa	aaacagtgtg	aaaattctgc	24420
aacttcatgg	ttagtccttt	agggtttttc	attctccctt	acttattggt	taattttacag	24480
atttactcctt	ttgttcattt	gacaaatatt	tgtcaaattgc	ttgtgcacag	tctgtattct	24540
caaattctag	gagaaaaaga	agggtgaaca	gtattagcgc	agaacgatac	taataatgat	24600
ggctactgtg	tatgagtagc	cagccctttc	ttggctttct	tggattgctt	tgtattctac	24660
atgaagatat	tccctgggct	ttacagggtca	ataaatggaa	attcagagag	attaatttga	24720
ccagggtgac	caacaaggag	atgacagcat	acactatgcy	agaagtatac	acagagtagt	24780
gtaggagcat	ataacctaaa	ctgggggtga	ggtgggataa	ggagttatca	gggaaggctt	24840
tttggaggag	ttgacaactg	agccgagttt	tgatggaaga	gtagaaatta	gcatgaacca	24900
atttcatgct	aataaagaag	caaaggaagc	gtggtctaca	ggcaaaagca	cagaggtaca	24960
ggaagtaatg	atatgttggg	gaataccctg	ttgactggag	cttagagtgc	aaggagagga	25020
ggctagggga	ggtgagggtt	gagggtttgg	cagcattgac	ttgcttcaag	gttcttaaga	25080
ggtgaaatag	atataaaatg	caactaagag	tggcttggtt	tattattacc	tagtgtgtta	25140
atctcaaatt	ttgaaatcta	tagcatctat	aggactggtg	ttactaatct	tacactcgat	25200
atgttactgt	tcttatacta	gatctattag	tccagtgttt	aaggagtggt	tgcagatttc	25260
taggtcagga	caggactcag	atgtacatta	ttaatgccta	tttcagttct	gaccttctca	25320
atgaaacct	tataagacct	ggggtaggaa	gagattgttc	tggaagtcac	aggaatatga	25380
actgtatttt	gtttaacaaa	caatacagta	tggaaattta	tcacccttcc	agaatattta	25440
tttcagagac	aaatttttat	cattcgttca	tttatttcat	aagatccacg	agtagggaac	25500
ctcactagac	attgctctga	gtatatggtc	tgagtttgca	gtacctcttg	tgtctccatt	25560
agattttatta	ggtcctcaat	agataaatca	gggaataaact	agatggattc	atttttttaa	25620
gacatgaaag	agcgatacca	tacatactgc	accttaaagg	tcaaccttag	agtatcatta	25680
tttttaatga	atgtataatt	tttaaatttc	atgtttactt	ttcctaagct	tttgactat	25740
attgcttaat	tccagctttg	aatgatatga	taaaagagtt	tatctccatg	ggaagtttgg	25800
ttgcactgat	tgccacaagt	cagtctcagc	aatctctaca	tcctttactt	gtttctgctc	25860
aaggagttca	catattttcag	tgcgctcaac	acattcagcc	tcctaatacag	gtaatacact	25920
acttgaagg	attattgaat	tatgtccctt	ttatagaaat	tatttttcaa	ttttattagt	25980
aattcgtggc	tttaaattta	tgcttctctt	aatgatttta	aggatatgta	agtcaacatt	26040
tggtgcatat	tgtgctagag	gcataaatta	taattttatag	ccacctgaaa	tgttagtatg	26100

cgctttccaa	gaaaatgact	tttttgaaaa	tggtatttct	ttgaatgaga	aagaacagag	26160
agaaatagat	agatggcttt	taaacacttc	attaattaaa	cttttttttt	ccaccatcac	26220
ataatggcac	ttagtcccct	ttgggaactc	atgaggggtt	tagtggtagt	gagctgaaag	26280
aaatatgttc	caggactggc	aaacatatct	taaattcttt	aaaattttca	cctagcatct	26340
accctaaata	ttcagaccct	gtgctagtta	actgctattg	aagaacaaag	gtattatatc	26400
tattattaag	gataatagaa	tggtatttga	gatattggtc	attgaatatg	aatatgtttt	26460
gagaaataag	ttttatagga	accaaaaaaa	aattctttaa	ggaaccatat	attactaaaa	26520
atgcttctta	ttggagaaag	aaatgacaat	catttattaa	tgtgattttt	tcacaacttt	26580
attaagatat	aatttaagta	caacaaactc	acataaagt	tacaatttga	tcagttttaa	26640
catatgtaga	tgccatgaaa	ccatcaccac	aattaaggaa	acaaacattt	tcatcactcc	26700
agaagtctcc	tagccctttt	actacccttt	cctcccctgc	tccatcccca	gacaactacc	26760
aaatttgcttt	ctgtcactat	agatttgtca	acctgatttt	ctccaaatat	acattcaaaa	26820
atatacagtt	gaatacaatt	ggaaattcga	attttgtgtt	tttttcttta	ggaacaaaga	26880
tgtgaaattc	tgtgtaattg	aataaaaaat	aaattggact	gtgatataaa	caagttcacc	26940
gatcttgacc	tgacagcatg	agctaaagaa	actggcgggt	ttgtggctag	agattttaca	27000
gaacttgtgg	atcgagccat	acattctcga	ctctctcgtc	agagtatatc	caccagagaa	27060
agtatgtttt	actattaaaa	cctgaacttg	gaatcttctt	tctattgtgg	agaaatgtaa	27120
ttgtagtaag	acaagaatta	aatatattcc	attgtagtat	ttgaataagc	agttatttga	27180
gtagaaaatt	agtgtttcca	gctaagatga	tggtcatatt	tgaaaattca	tatagtgaat	27240
ataactagta	aaagaagttt	tgtttatttt	taaacagaat	tagttttaac	aacattggac	27300
ttccaaaagg	ctctccgcgg	atttcttctt	gcgtctttgc	gaagtgtcaa	cctgcataaa	27360
cctagagacc	tggtttggga	caagattggg	gggttacatg	aagttaggca	gatactcatg	27420
gatactatcc	agttacctgc	caaggtatgt	ttaaaaaaag	aaaaagtga	tacttactcc	27480
cagaagaacc	actgtattat	tggttttggc	tttatgtgtc	agcttgccca	atctccgtgt	27540
gagtcaacaa	gtgtttactg	agttaccaa	taaatgtctt	aacactattt	taggtacttt	27600
aacaaatttt	aattttatta	attaattttt	tattagaatt	gagacctcac	tctgtcatct	27660
aggctggagt	acactcacag	ctcactgcaa	cctcaaactc	ctgggctcaa	gcaatcctcc	27720
tgctcagcc	tccccagtag	ctagaactac	aggcatgaac	caccatgccc	ggccaactct	27780
ttaattttct	tagagacgga	gtcttgctat	gttgcccagg	cagacagatt	ttaatgtgta	27840
tgatgcagtc	tttgatgata	agaaacttat	aatggaaagc	tgaggtgata	gttacagtaa	27900
atacattttg	atgtataatt	ctgtttgctt	taatcattca	aattgtagta	aagcaagatg	27960

5
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30
 31
 32
 33
 34
 35
 36
 37
 38
 39
 40
 41
 42
 43
 44
 45
 46
 47
 48
 49
 50
 51
 52
 53
 54
 55
 56
 57
 58
 59
 60
 61
 62
 63
 64
 65
 66
 67
 68
 69
 70
 71
 72
 73
 74
 75
 76
 77
 78
 79
 80
 81
 82
 83
 84
 85
 86
 87
 88
 89
 90
 91
 92
 93
 94
 95
 96
 97
 98
 99
 100
 101
 102
 103
 104
 105
 106
 107
 108
 109
 110
 111
 112
 113
 114
 115
 116
 117
 118
 119
 120
 121
 122
 123
 124
 125
 126
 127
 128
 129
 130
 131
 132
 133
 134
 135
 136
 137
 138
 139
 140
 141
 142
 143
 144
 145
 146
 147
 148
 149
 150
 151
 152
 153
 154
 155
 156
 157
 158
 159
 160
 161
 162
 163
 164
 165
 166
 167
 168
 169
 170
 171
 172
 173
 174
 175
 176
 177
 178
 179
 180
 181
 182
 183
 184
 185
 186
 187
 188
 189
 190
 191
 192
 193
 194
 195
 196
 197
 198
 199
 200
 201
 202
 203
 204
 205
 206
 207
 208
 209
 210
 211
 212
 213
 214
 215
 216
 217
 218
 219
 220
 221
 222
 223
 224
 225
 226
 227
 228
 229
 230
 231
 232
 233
 234
 235
 236
 237
 238
 239
 240
 241
 242
 243
 244
 245
 246
 247
 248
 249
 250
 251
 252
 253
 254
 255
 256
 257
 258
 259
 260
 261
 262
 263
 264
 265
 266
 267
 268
 269
 270
 271
 272
 273
 274
 275
 276
 277
 278
 279
 280
 281
 282
 283
 284
 285
 286
 287
 288
 289
 290
 291
 292
 293
 294
 295
 296
 297
 298
 299
 300
 301
 302
 303
 304
 305
 306
 307
 308
 309
 310
 311
 312
 313
 314
 315
 316
 317
 318
 319
 320
 321
 322
 323
 324
 325
 326
 327
 328
 329
 330
 331
 332
 333
 334
 335
 336
 337
 338
 339
 340
 341
 342
 343
 344
 345
 346
 347
 348
 349
 350
 351
 352
 353
 354
 355
 356
 357
 358
 359
 360
 361
 362
 363
 364
 365
 366
 367
 368
 369
 370
 371
 372
 373
 374
 375
 376
 377
 378
 379
 380
 381
 382
 383
 384
 385
 386
 387
 388
 389
 390
 391
 392
 393
 394
 395
 396
 397
 398
 399
 400
 401
 402
 403
 404
 405
 406
 407
 408
 409
 410
 411
 412
 413
 414
 415
 416
 417
 418
 419
 420
 421
 422
 423
 424
 425
 426
 427
 428
 429
 430
 431
 432
 433
 434
 435
 436
 437
 438
 439
 440
 441
 442
 443
 444
 445
 446
 447
 448
 449
 450
 451
 452
 453
 454
 455
 456
 457
 458
 459
 460
 461
 462
 463
 464
 465
 466
 467
 468
 469
 470
 471
 472
 473
 474
 475
 476
 477
 478
 479
 480
 481
 482
 483
 484
 485
 486
 487
 488
 489
 490
 491
 492
 493
 494
 495
 496
 497
 498
 499
 500
 501
 502
 503
 504
 505
 506
 507
 508
 509
 510
 511
 512
 513
 514
 515
 516
 517
 518
 519
 520
 521
 522
 523
 524
 525
 526
 527
 528
 529
 530
 531
 532
 533
 534
 535
 536
 537
 538
 539
 540
 541
 542
 543
 544
 545
 546
 547
 548
 549
 550
 551
 552
 553
 554
 555
 556
 557
 558
 559
 560
 561
 562
 563
 564
 565
 566
 567
 568
 569
 570
 571
 572
 573
 574
 575
 576
 577
 578
 579
 580
 581
 582
 583
 584
 585
 586
 587
 588
 589
 590
 591
 592
 593
 594
 595
 596
 597
 598
 599
 600
 601
 602
 603
 604
 605
 606
 607
 608
 609
 610
 611
 612
 613
 614
 615
 616
 617
 618
 619
 620
 621
 622
 623
 624
 625
 626
 627
 628
 629
 630
 631
 632
 633
 634
 635
 636
 637
 638
 639
 640
 641
 642
 643
 644
 645
 646
 647
 648
 649
 650
 651
 652
 653
 654
 655
 656
 657
 658
 659
 660
 661
 662
 663
 664
 665
 666
 667
 668
 669
 670
 671
 672
 673
 674
 675
 676
 677
 678
 679
 680
 681
 682
 683
 684
 685
 686
 687
 688
 689
 690
 691
 692
 693
 694
 695
 696
 697
 698
 699
 700
 701
 702
 703
 704
 705
 706
 707
 708
 709
 710
 711
 712
 713
 714
 715
 716
 717
 718
 719
 720
 721
 722
 723
 724
 725
 726
 727
 728
 729
 730
 731
 732
 733
 734
 735
 736
 737
 738
 739
 740
 741
 742
 743
 744
 745
 746
 747
 748
 749
 750
 751
 752
 753
 754
 755
 756
 757
 758
 759
 760
 761
 762
 763
 764
 765
 766
 767
 768
 769
 770
 771
 772
 773
 774
 775
 776
 777
 778
 779
 780
 781
 782
 783
 784
 785
 786
 787
 788
 789
 790
 791
 792
 793
 794
 795
 796
 797
 798
 799
 800
 801
 802
 803
 804
 805
 806
 807
 808
 809
 810
 811
 812
 813
 814
 815
 816
 817
 818
 819
 820
 821
 822
 823
 824
 825
 826
 827
 828
 829
 830
 831
 832
 833
 834
 835
 836
 837
 838
 839
 840
 841
 842
 843
 844
 845
 846
 847
 848
 849
 850
 851
 852
 853
 854
 855
 856
 857
 858
 859
 860
 861
 862
 863
 864
 865
 866
 867
 868
 869
 870
 871
 872
 873
 874
 875
 876
 877
 878
 879
 880
 881
 882
 883
 884
 885
 886
 887
 888
 889
 890
 891
 892
 893
 894
 895
 896
 897
 898
 899
 900
 901
 902
 903
 904
 905
 906
 907
 908
 909
 910
 911
 912
 913
 914
 915
 916
 917
 918
 919
 920
 921
 922
 923
 924
 925
 926
 927
 928
 929
 930
 931
 932
 933
 934
 935
 936
 937
 938
 939
 940
 941
 942
 943
 944
 945
 946
 947
 948
 949
 950
 951
 952
 953
 954
 955
 956
 957
 958
 959
 960
 961
 962
 963
 964
 965
 966
 967
 968
 969
 970
 971
 972
 973
 974
 975
 976
 977
 978
 979
 980
 981
 982
 983
 984
 985
 986
 987
 988
 989
 990
 991
 992
 993
 994
 995
 996
 997
 998
 999
 1000
 1001
 1002
 1003
 1004
 1005
 1006
 1007
 1008
 1009
 1010
 1011
 1012
 1013
 1014
 1015
 1016
 1017
 1018
 1019
 1020
 1021
 1022
 1023
 1024
 1025
 1026
 1027
 1028
 1029
 1030
 1031
 1032
 1033
 1034
 1035
 1036
 1037
 1038
 1039
 1040
 1041
 1042
 1043
 1044
 1045
 1046
 1047
 1048
 1049
 1050
 1051
 1052
 1053
 1054
 1055
 1056
 1057
 1058
 1059
 1060
 1061
 1062
 1063
 1064
 1065
 1066
 1067
 1068
 1069
 1070
 1071
 1072
 1073
 1074
 1075
 1076
 1077
 1078
 1079
 1080
 1081
 1082
 1083
 1084
 1085
 1086
 1087
 1088
 1089
 1090
 1091
 1092
 1093
 1094
 1095
 1096
 1097
 1098
 1099
 1100
 1101
 1102
 1103
 1104
 1105
 1106
 1107
 1108
 1109
 1110
 1111
 1112
 1113
 1114
 1115
 1116
 1117
 1118
 1119
 1120
 1121
 1122
 1123
 1124
 1125
 1126
 1127
 1128
 1129
 1130
 1131
 1132
 1133
 1134
 1135
 1136
 1137
 1138
 1139
 1140
 1141
 1142
 1143
 1144
 1145
 1146
 1147
 1148
 1149
 1150
 1151
 1152
 1153
 1154
 1155
 1156
 1157
 1158
 1159
 1160
 1161
 1162
 1163
 1164
 1165
 1166
 1167
 1168
 1169
 1170
 1171
 1172
 1173
 1174
 1175
 1176
 1177
 1178
 1179
 1180
 1181
 1182
 1183
 1184
 1185
 1186
 1187
 1188
 1189
 1190
 1191
 1192
 1193
 1194
 1195
 1196
 1197
 1198
 1199
 1200
 1201
 1202
 1203
 1204
 1205
 1206
 1207
 1208
 1209
 1210
 1211
 1212
 1213
 1214
 1215
 1216
 1217
 1218
 1219
 1220
 1221
 1222
 1223
 1224
 1225
 1226
 1227
 1228
 1229
 1230
 1231
 1232
 1233
 1234
 1235
 1236
 1237
 1238
 1239
 1240
 1241
 1242
 1243
 1244
 1245
 1246
 1247
 1248
 1249
 1250
 1251
 1252
 1253
 1254
 1255
 1256
 1257
 1258
 1259
 1260
 1261
 1262
 1263
 1264
 1265
 1266
 1267
 1268
 1269
 1270
 1271
 1272
 1273
 1274
 1275
 1276
 1277
 1278
 1279
 1280
 1281
 1282
 1283
 1284
 1285
 1286
 1287
 1288
 1289
 1290
 1291
 1292
 1293
 1294
 1295
 1296
 1297
 1298
 1299
 1300
 1301
 1302
 1303
 1304
 1305
 1306
 1307
 1308
 1309
 1310
 1311
 1312
 1313
 1314
 1315
 1316
 1317
 1318
 1319
 1320
 1321
 1322
 1323
 1324
 1325
 1326
 1327
 1328
 1329
 1330
 1331
 1332
 1333
 1334
 1335
 1336
 1337
 1338
 1339
 1340
 1341
 1342
 1343
 1344
 1345
 1346
 1347
 1348
 1349
 1350
 1351
 1352
 1353
 1354
 1355
 1356
 1357
 1358
 1359
 1360
 1361
 1362
 1363
 1364
 1365
 1366
 1367
 1368
 1369
 1370
 1371
 1372
 1373
 1374
 1375
 1376
 1377
 1378
 1379
 1380
 1381
 1382
 1383
 1384
 1385
 1386
 1387
 1388
 1389
 1390
 1391
 1392
 1393
 1394
 1395
 1396
 1397
 1398
 1399
 1400
 1401
 1402
 1403
 1404
 1405
 1406
 1407
 1408
 1409
 1410
 1411
 1412
 1413
 1414
 1415
 1416
 1417
 1418
 1419
 1420
 1421
 1422
 1423
 1424
 1425
 1426
 1427
 1428
 1429
 1430
 1431
 1432
 1433
 1434
 1435
 1436
 1437
 1438
 1439
 1440
 1441
 1442
 1443
 1444
 1445
 1446
 1447
 1448
 1449
 1450
 1451
 1452
 1453
 1454
 1455
 1456
 1457
 1458
 1459
 1460
 1461
 1462
 1463
 1464
 1465
 1466
 1467
 1468
 1469
 1470
 1471
 1472
 1473
 1474
 1475
 1476
 1477
 1478
 1479
 1480
 1481
 1482
 1483
 1484
 1485
 1486
 1487
 1488
 1489
 1490
 1491
 1492
 1493
 1494
 1495
 1496

catccact	agcagtgtgg	ggggttcctg	attctccaca	tctttaccaa	caccattatg	29880
tttctcaatt	gtgggctagt	ctcacatttg	gaaagctagt	gggagcagcg	atccatctat	29940
taaaagttgt	atgaaattga	gtaatgagcc	acctctctct	tgtagggcct	attatgttct	30000
tgcttaaggc	aatcttcatg	cattgtgaac	agaattatac	ataaatgctc	agataaaagg	30060
gcaaaccatt	cttaaaggga	gtagacaact	agaggcagga	gaccatactg	aggcaggaag	30120
ctggggtttt	tatggttctg	ttacttttga	ctatatctca	ccattgcttt	tgtcaaagtg	30180
agactaggtc	taagtttttt	tcaggtataa	ggtgagtgtg	gtaattaagg	ggcatgctag	30240
cagatcattt	tgggtaatgc	ttcacagtcc	accactgggtg	tgtcattgtg	gtcgcagatc	30300
cagtatctta	gctgtgtaat	ttcagacatc	agcaatatta	gtttaacaaa	gggcaattag	30360
attccaagac	aaaggaatcg	tgtattattc	tagccttatt	caaacttgat	ttataaatca	30420
gttttagtaat	ttattttatt	gtttctgtat	ttatttttat	ttctttgaga	tggagtctca	30480
cttattggc	caggctggag	tgtagtgatg	caatcttggc	ttactgcaac	ctctgcctcc	30540
gggttcaag	ctattctcct	gcctcagcct	cccgagtagc	tgggattaca	ggctaatttt	30600
ctattttta	gtagagatgg	ggtttcacca	tggtggccag	gctggctctg	aactcctgac	30660
ctcgagtgat	ctgcccgcct	tggcctccca	aagttctggg	attacagacg	tgagctaccg	30720
gcccagctc	agtttagtaa	tgtataactg	ggttttaccc	agttgtaa	tactcttttg	30780
tggtgttttt	ttgagaactg	gcaatgacgg	agaaactaaa	agtgccaggc	tggtgccttg	30840
ttcctgttat	tttgccttag	tttttttttt	tttttttttt	ttctctgaga	ctgagtcttg	30900
tggtgttacc	aggctagagt	ggagtggcat	gatctcggct	cactgcaacc	tctgcctcct	30960
gggttcaagt	gattcctgcc	tcagcctccc	gagtagctgg	gattacaggc	gcctgccacc	31020
gcacccggtg	aattttttgta	tttttagtag	agacgggatt	ttaccatgtt	ggccaggctg	31080
gcctcgacct	cctgacctca	tgatccacca	gcttcggcct	cccaaagtgc	tgggattaca	31140
ggcgagaacc	accgtgcccg	gtcttgccct	agttattttct	tgttccctcc	tctagtcccta	31200
tagttctctg	actgtattga	ggaaatgtaa	ttaaatatta	ttatgttaat	agatatttat	31260
gtggttgaat	attagaaatt	ccttattttg	gtcacatatc	ctgatcagta	gttggtcttc	31320
tggagatagt	gattttttcac	tagagatgac	tttaggacct	attcaggttt	tttttaagat	31380
cccaatttaa	ggaaagacta	ttctcattat	tgattttgct	atatgcaggg	aaatttat	31440
cgaaagggtt	ttcagttggc	ttttagggaa	gattatatat	tctctttttt	tttttttggc	31500
cttttcccac	atgttctaaa	aatgatatat	tctttaactc	ctatgaaaat	acattgtttc	31560
agtaattgaa	gatgctgatt	aaagtcatat	ctctacacat	tttttaaaat	ttgagataga	31620
tgggactttg	tcccttctta	caccattcac	ttattcactt	ggaaaaacta	ttatccaata	31680

31740 cttatgtggc agacactgtt tctggcaciaa gggattcagc agtgaacaaa actgcctttt
 31800 tggagtttac attctactag tggaaagcga caacaagcag atagacacat tcagtatata
 31860 attcactgtc agatgggtggg ggtaagtcct atgtaggaag aaaagcaggg taaggaggct
 31920 tggagtaact ggagtgaagc atagatggac ttgtcaggaa agggtttctg aagagggtgt
 31980 atttgggcag agatctaaat aaaatgaagc aacaagccat gagaatatcc gggggaaaat
 32040 gttctgggca gaagcatcaa gcatagaact tgtggtatga tttttattct agcacacatt
 32100 aattttaaaa atgtataaaa gacatccatt taatcatatt aaagatttcc atgattcatt
 32160 tagacttagt cagaaaccaa atttatatatt tctttttaaa taattttatc tcaactctta
 32220 ttttaccocaa taggggccag agttactcag caaatacatt ggagcaagtg aacaagctgt
 32280 tccggatatt tttattaggt tggtagccta tgaatgtttt taaagtaact gactctgtta
 32340 ttatttatca atcagtgtt tttttggtct tgttttttga agaactgata tttgaaacct
 32400 tgggtttatg tgaattatta ataagctaga ggacgtggat tctctatttc atcaaataat
 32460 taaaaacatt ttagatatta aattttggaa attatttggt tttgttttac aatagaaata
 32520 tccctcaaag tggaaatcgaa gtggttattc aaagaaatct cagagtagat tcttatatga
 32580 tcaaaataat tgcccctaatt ttatctctaa attttgtaag ttctaaattc ttttttcccc
 32640 cagtttctaa tttatctctt ataagtcaag agtccatctg gccaatttaa tttcagtga
 32700 ttaactatt ttgcatatat taaaaaactg tatatgaata cagaagatgg tatttaagga
 32760 tcaaaataat tattcaaagtg tgatagcatt atggggagtt ttaaaataaa agttactgtt
 32820 ttttcttcc aaaaatttta ttataaagta tacagtttaag agaataataca taaaatacat
 32880 atgcagctta aggaagaata ataaaatgaa tacttcatgt attcaccacc gagtttacca
 32940 ggaaaaagca taaacaaaat aaacctcttc cacgtaattc ctgggttaaa gagaagttat
 33000 agtggaatatt atttgggagc aaacgataat gaaaatacta tccattaaaa ttgttagatg
 33060 ttgcaaaact gatttcaagg aaaatttata gtgttaaatg tttagaaaag aaaaaagggt
 33120 agaagttaac cacttatgta tctatctcat gaaattagga aaattataga tataaactaa
 33180 aaaatatgtt aaaagggaaa taataaagat aagaatgaag tttaatgaaa caaaaacag
 33240 agaagctcac aaagccaaga tttatttttt gaacaccgag tacaattgac aaatctctaa
 33300 caagtttgat taagaaaaaa gaaagcatga ataaacaatt ttagggataa aaagggaac
 33360 atcgctaaag atatcccaga aatgtaaaag ataataaggg aatattatga aaatattcat
 33420 gccaatatcat ttgaaaactt aggtgacata gacaaaaaca aaattgacca aaattgagca
 33480 aaaaagaaac aaaatctgag tagtcctgta acttagtaaa aattgagtta gaaaagttaa
 33540 agaagtcttt acacaaatca aacatcagac tcagttttct aggagagttt tgccaaacat

tcaagtagca gataattctg gtctatTTTT ggccccagaa gatatatTTT acttgccatg 33600
 catttaatga gatagctgtt gatttttttTc aatcaccgtg acaggtgttt tatattaggt 33660
 gttattogcc agacatctag tccacctgtt gccagatag gaattaatat tcacttattt 33720
 tgaattaaaa tttgttaata aattaataaa acaaagtcaa agttcaaatt attaaaaaag 33780
 taaaagaaat aaaatatatt ttatagagag cccttacaaa acagtaccaa cataatgagc 33840
 tttccaaatt ttgaatgggc aaaataaatg aataggcatt tcacaaaaga aggaagggtg 33900
 gccataagt atatattaat ataaaaatgg ttacttgtaa taggaatcaa aagtgtttga 33960
 cttattgact aagagtcagt ttttgTTTTg atccctgtta gtctatccag aaggcatggg 34020
 tcttaataaaa caccttgacc tcaacagttt actgaataca agggtaattt catatgcctt 34080
 gccttcttta agggtttTgt gtaaagatta aaataaatac ataaatatat ataaatacat 34140
 ttatatgtat ttatatgtaa ttacatacaa cttgccttct ttaagggttt gttgtaaaaa 34200
 ttaaaagaag tatataaata tatataaata cataaaataa atacattcat atatgtatat 34260
 gaaatcactt tgccaactat gaagcctgat tcaaataatga aatgttgttt gtttttccca 34320
 ggcacaggc tgcaaagccc tgcattcttt tctttgatga atttgaatcc attgctcctc 34380
 ggcgggggtca tgataataca ggagttacag accgagtagt taaccagttg ctgactcagt 34440
 ggatggagt agaaggctta cagggttaata attataaata cagaaataga atgttataac 34500
 aaatgtcat catgtcatca gattttggta aaaaaatgtt cttttttcct ctaggtgttt 34560
 atgtattggc tgctactagt cgccctgact tgattgacct tgccctgctt aggctgggc 34620
 gactagataa atgtgtatac tgtcctcctc ctgatcaggt gacaatttca tatttagagt 34680
 tcaaaaccca acaaatgcta cactctttcc ttgtgagctt tacttctgcc aggtaatggc 34740
 aattgtcctt agaagaccag ctttcttagg gaaaagcttt agccactgtt tgctcaaagc 34800
 ataaaaagat tctgaattag atgcaaagcc tttttttggc ccagtgcaag tctgaaaact 34860
 ttgtaatcct tctgtgttgg ctgattgggg aaaaaaaat gcaagaaacc taatgtatta 34920
 tattttcaca ttatcttctg ttcaaagatt acatacttcc attatcctgt caaaaaaaaa 34980
 actctgatac agaatcaagc atgtgaatcg taagcatgta agcaggtttc atagagataa 35040
 tttttcaact cttccttgct ctgtgttggt ccaactctta ttctccaatt tagaagcaaa 35100
 caaataaatg aatgaaagaa cagatagaca aatgaatagt caaaggtata aagtatctgt 35160
 atatatgtta catgtagcta ttattttaat tatttagatt ttctttttga aataccttct 35220
 tggcacactt gcctaaatct agaaaataag cactgtgtga ataagaaatt atttacactg 35280
 aatattttgt aggtttttgg gtttttgttt ttacagacaag gtctcacttt gtcacccagg 35340
 ctggagtaca ctggtacgat cacaactcac tgcagcctct atggcccagg ctcaagcaat 35400

ctccccacct	cagcctcccg	agtagctggg	accacaggca	cacgctacca	tgcccagata	35460
atatttattat	taatttttgt	atagagatgg	ggctctccctg	tggtgcccag	gctttcttga	35520
actccagggc	tcaagtgate	ctcccacctc	aacctcccaa	agtgttggga	ttacaggcgt	35580
gagccaccat	gcccagcctt	aagagtgttt	gattttcatt	cattttccta	tatatattat	35640
ttctgttggg	gaaaaaattc	caaggaagat	aaatagtagg	ctgttggtac	atttctcaac	35700
ttacttataa	agcttttttag	atatataagg	ttaatttatg	aagaaaatca	taagatacac	35760
aattttaagat	aataattttta	atatttatttt	ttatttgtta	aataaatttt	tctcctttca	35820
gggtgtcacgt	cttgaaattt	taaatgtcct	cagtgaactct	ctacctctgg	cagatgatgt	35880
tgaccttcag	catgtagcat	cagtaactga	ctcctttact	ggagctgate	tgaaagcttt	35940
actttacaat	gcccaattgg	aggccttaca	tggaatgctg	ctctcgagtg	gactccaggc	36000
aagttatatg	aggaagtgtg	tatgacattt	tatgagtgat	aaaagaagta	caatgtcaaa	36060
atttccacct	taaaaaatgc	tatttttttaa	acaactttgg	taaaactgta	tagaaacata	36120
aattttacctt	tagttgaatg	ttccatagtt	ggaatatggg	ttttgcagag	aattttataat	36180
tatgaagttt	gatgtctgtt	tctttaacat	taccttaata	ttggcaaaaa	catgttggtg	36240
tttgcaagga	tattatttaa	attgggatac	catgaattaa	atactacaaa	caaaaataat	36300
ttagagttttt	tgtttgtttg	tactttaact	tttaaaaaat	aatcagttaa	agttgttggt	36360
ttgaagctca	cattgttcca	atctggccaa	taggagcccc	ttttgtatgg	ctcctgtatc	36420
tttatgacat	gtcctcatca	ttcttgaatc	acttctcac	ttccagatac	agtaagttat	36480
ttttggccag	gtgcagtggg	tcacgcctgt	aatcccagca	ctttggcagg	ccaaggcagg	36540
aggatcattt	gggcctagtt	tgagaccaaa	tcatggttgc	acaaactgta	cccactatgg	36600
acaacagagt	gggatcttgt	ctctgtgaaa	aatttaaaaa	ttagctgggc	atggtggcac	36660
atacctgtag	tcctagcttc	ttgggagagg	ctgtggcagg	aggatcgctt	gagtaaatcc	36720
aggatgcagt	gagccatgct	tgtgccactg	cactccagca	tgatgacag	aatgagaccc	36780
tgcccccaaa	aaagaaaaat	attcttgggt	tatcttgtag	tttctgtatc	ccagccctag	36840
catcagcctt	ttctctaaag	acagtattat	gatttttaata	tttacagtag	atatttgaac	36900
tgttacatta	tagactttac	catatatattt	ctaggaagga	ttattctatt	actcttcttt	36960
accacatttg	tttggaatgt	ctacagaacc	tacagtttct	aatcagaaa	ctccctaggt	37020
ttttgtctatt	ttggcaagcc	attgaagtcc	ttccctctcc	ctttactacc	agaaagggtg	37080
gtattttag	agctctctat	aatgagaaa	cactctataa	catggttgat	tcatcatttt	37140
ggagtagaaa	agtatgaatg	gaaagtcaga	gacataaaaa	taaagcccag	aggtctgagt	37200
cttagcttca	ttacagactt	tcttggggga	tggttggtaa	attatctaca	cattctatct	37260

Tgtctttata attttaatag ttaaattttt accatgtgcc tcaaaaccgt tagagaatta 37320
atgagctctt tgaaaaatgc ttctaagttt cttgtattgc tctaatagaa tgctatctat 37380
gttattattht atttctgaga ctaaaattgt ttacatcttt aaactggttg tctttttgtg 37440
tatttttagga tggaagttcc agctctgata gtgacctaa gctgtcttca atgggtctttc 37500
ttaaccatag cagtggctct gacgattcag ctggagatgg agaattgtggc ttagatcagt 37560
cccttgtttc tttagagatg tccgagatcc ttccagatga atcaaaattc aatatgtacc 37620
ggctctactt tggaagctct tatgaatcag aacttggaat tggaacctct tctgatttgg 37680
tatcttgtgc agtcatcatt atacagttct gaaatataaa gctatatgtt ggtgtaaagt 37740
tgcagtgatt tctctcctaa ccagccccac atattcttcc tggttggttg gttcttcagt 37800
aaaatagtct tgtttcttgc ttacactaat tggtaatattg cattccttgt taagattttc 37860
aagacagggc tgggagcaag gaaccaaagt agcgcgtggc tgtgattacc tttggtttct 37920
tgagggtttc tcttacctag tggctttaaa acatcttttag gagcagttcc attttatagt 37980
taacttaaat tctgttatca tgaacagttg aggataatga ataattgat acaataatgt 38040
tgaaaattcc tgaaaacaaa gtgttatctg tgatactttt gctgcatagt aagcacaatg 38100
tggtgtactg ataattgtttc aacaggaaag tgttttgatt aaatgtgggc agtatcactg 38160
tctactagc attcaacatc tcttctaaaa attaatagt gttcactgta attttattgg 38220
tcatgtaac atctgtacat gtgtttgggt atctatatgt ttcttggtt tttgtacatt 38280
tgctttatta atttaggctt tttttttttt ttttttttga gacagtctca ctctatcatc 38340
tgactagag tgcagtggca caattatggc tcaactgcagc cttgacctcc tgggcttagg 38400
tgattcttcc acctcagcct cctgagtagc tgggactaca ggcacatgcc accatgcccc 38460
gctaattttt gtatgttttg tagagacgag gtttcacatc attgcccagg ctggtctcaa 38520
actcctgggc tcaagctatc tgcgtgcctt gacctcccaa agtgctagga ttacaggtgt 38580
gagccactat gcctagccta actcagactt taaaaatata aaagcaattc atttttattc 38640
ccaagaacag taagggtgtg gtttaatttt agtctttaat tctgttttta atttattcta 38700
tttagaaatg tcccagaaac ttagtataac tttactttct gaaaatgaag aaacctgtcc 38760
ttgggcatta gtgtgttggg ttttaagcaac aaagttaaaa aaacctacc tgtgttatgg 38820
caattttcac ttgatgggtg ttctataaca caggtatcag tgaaccttta taaaagatga 38880
acaacttttc agcttgctta atttcagtta attaacatgt atacttatct atgttaatgt 38940
tttattgctt aaaatgttta atttttatat ttggttaaaca gatagttttt tctctcccc 39000
tcttcttcc atctttcatt actacaattt accatgcaga gtcacaaatg tctctctgca 39060
ccaagctcca tgactcagga tttgcctgga gttcctggga aagaccagtt gttttcacag 39120

cctccagtgt taaggacagc ttcacaagag ggttgccaag aacttacaca agaacaaaga 39180
 gatcaactga gggcagatat cagtattatc aaaggcagat accggagcca aagtggagta 39240
 tggctttttc cccctcatta taattgttaa aacttcctaa aaattgtttc acccttttga 39300
 tatataatttc tttgacttat aaacgagcta tatttataaa caagggacca gaacacatta 39360
 actcagtcac ggttatgtgc ttccttgctt tcaatgtttc attatcttat aaggaagaga 39420
 acgtatggtc tcttgaaaaa actgacaata agaagtaaca actggactac cacatttttt 39480
 tttacatcct taatttaact ctctgtcaat ttcttttttt acttaaggag gacgaatcca 39540
 tgaaccaacc aggaccaatc aaaaccagac tggctattag tcagtcacat ttaatgactg 39600
 cacttggtca cacaagacca tccattagtg aagatgactg gaagaatttt gctgagctgt 39660
 aagtaacaga ttctgttttg gaagtacagc tactattaca agtgacatag tattacactt 39720
 aaacctttta agttcgtgtt taaaataaaa atattttgaa tatttaaaaag ctaattcaaa 39780
 aatgatgtgt cgtagctatg cattaataaaa ccccaaaatg tcagaagtac agaagtcaaa 39840
 atgagtttt cattaaccag ttcatttgat tatatttgaa ttattcataa tggactcatt 39900
 atttttagt aactttgggc tgggtgctgt ggctcatgcc tgtaatcca gctctttggg 39960
 agggccaaggc aggtggatca cctgaggtca ggagttcgag gcaagcctaa ccaacacggg 40020
 gaaaccccat ctctactaaa aatacaaaaa ttagccaggt gtggtggcat gtgcctgtag 40080
 gccagctac ttgggaggct gagacaggag aattgcttga acccaggagg tggagggtgc 40140
 agtgagccga gattgcacca ctgcactcca tccagcctgg gccacagagc gagactgtgt 40200
 caaaaaaaaa aaaaaaaaaa atttagtaac ttcgaagaaa taagaaggaa aattaaaagt 40260
 gaaagtgat tctaattgat agtttataaa attttgttat aaaaatacct gttttgcctt 40320
 caaaataatt tatattaata ttttattgac ctcaagaaca tttaaataca ttcagattta 40380
 ttcattttgtg gaccacattt gttatacatt ggatttaaaag gatccttgca attgagttta 40440
 tggccaccta tgcactctgag acccatggac tgggaaccat tctaggtcaa tgattcagtg 40500
 tgattcaatt taagagatgt ttattcctgg tctttagaag ctgctacctt ttgttatcta 40560
 attttgcagt actttgaagt atgtatgtat gtgtacatac gttagtgtca tgtattttatt 40620
 aaagaagaat cagaaaaacag aggtaaggaa aaataaggaa acaaatttct gttaagccca 40680
 ccacctccca aagcatattt gtttatatgc ttatatatgt tttcctatta tggtaagaac 40740
 agtctgtaca tattgctata tagcagtcct cctttatcca catacatcct gaaaattggt 40800
 ttacattttta aatgttaact actttattgt ttttaaagtgt cattttatag tgtagctatg 40860
 ccacaatatc caatttttag acatttaaat tgctcccagg caatgtggta atgaacattc 40920
 ttgcagctga atatatgcac atatctaatt gtttcactag gatagaggtg gaattgtata 40980

ācagggagct cacatTTTTT aaggctTTTTg aaatgtattg ccaaattgcc tgccagatat 41040
 actgcaccat cactaacatt gtgtgttgca gtatttttct aaacttggcc cttttgattt 41100
 tagaaaaatg atatcaataa tttacatttc tttgattaaa gtgtagaagt tataatTTTT 41160
 catattattc attgtcattt gtattttatc ttttctaact tgtctcttca tcccctttgc 41220
 tccgttttct attggagtgc aactttattt gtaagaattc tttttaattt ctgtgactgg 41280
 aatTTTTTTT tctagtttgt tatttcccggt tcattttctta aaatataatt gtgtttgcc 41340
 acaatccatt atcttttgtt ttgtaatggt agtatTTata catattaaat tatctctttc 41400
 ttttttcaga tatgaaagct ttcaaaatcc aaagaggaga aaaaatcaaa gtggaacaat 41460
 gtttcgacct ggacagaaaag taacttttagc ataaaaatata cttctttttg atttggttct 41520
 gttaagtttt ttgatggctt ttccatatgt tgtaacagga aaaaaatggt gtctatgaat 41580
 ttcttcttaa ttttaacaaat ttggttaatt tataaaatca cagattggta aatgctataa 41640
 tatgtaatg atcaggattg agattaatac tgtagtataa attgggacat tataacagat 41700
 tccatatttt atttcctaaa atctaaattc agtctttaat gaaataatat tagccaaatg 41760
 ttggaactaa tttatttctt ttgaggaaaa gataataaag aatgtaatta aatttaaatt 41820
 tcttggaatt cccagtgtga tattcatcac ctttgtagca ttgacaaat tttatgctta 41880
 gcagcttctt cactgttttg aaataaaaata tcctattacc tactgatata attatctgtt 41940
 tttgtatat caaaaaatgt gaaatttaca cataattcaa atacatttaa ttatccgctc 42000
 taccagaaat gaaatcacat ccctctacta tactacatcc agctccaagc ccaagatatt 42060
 taaatgacat ccattcctct cctagtcca gttatgattt tatcttgata ttctctcata 42120
 tatgaactaa attataaagt tagccacat caatacaatc tgcgtatcta atatcttaac 42180
 tatatagtaa tggggtaagg gaacagcaaa aaggagaaca ttaattaaaa tatacaagta 42240
 agcctgggca acatagttag accccatctc ttaaaaaaaa aattagccat gcatgatggt 42300
 atgcctctag tcccagctac ttgggagggt gaggtaggag gatcacttgc tcccaggagg 42360
 ttcaagggtc taaaccagca aagctcagaa tcccagggga tagaaacaaa gacttagtggt 42420
 atcactagta ttaaactgag acacgtcacc ctgcattgca ctttgtttct cagttctttg 42480
 atgaaatcac tgagctgaca tacctgccct cttttcacca taaagtgagt ttcatgatca 42540
 gaagcaatgt ctatgggata gcctaacaaa caatgtaaaa accatttagt aagttcatga 42600
 aggggtggtg tggtaaaaaat ttggagaaca tacaaaacaa atacaattcc aagggtgtgtc 42660
 ccctccagga aggacaaatt gctgcctgct ctgtgataga agaggatcag atgtaatcaa 42720
 cctgccgtca gacttgggct gttctctcct ggggtgtggac ttgcctggtt ggtcactgct 42780
 gctgacaagt aggctgtcaa tatagctggg ttgtcatgtc agctgtggtg agggggaagt 42840

ccacattgtg gaggccacat ccctgcactc ttggccaatt tgaccatgaa tcttaagcac 42900
 tggggtggct ggaaaagaca gccgattgac atccatacag aggtcatctt gaccacttga 42960
 ttagtataag cactgaaggc ttttaactga gcattcacat aggacacaaa tattctgatt 43020
 ctttggggccc attccaagaa ctctgggcat acttttcctc cagacctcat acccagttgt 43080
 gttctttcca aatttctggg catctgggta tgttattagc cactatctgt gaatcagcat 43140
 agatTTTTat atcagacatc tctacctcct gacagaatgg aggagatatg ttacttaaca 43200
 attctgttcc cttggaagat ttctgtctc cactgtttgt aagggtact ccctcaatgt 43260
 agcagtaatg ctttactct gatgggaagt cacagtggaa ttctgggtct ccaagaatta 43320
 gtgttagtg atacacagt tctgataatc cccagagtgt ctggtgccct tggatcctgt 43380
 gaagaaggct tggagaaaag aagattcatg gcaagaactt gtgatgtgat gacagggcct 43440
 tttctctggc tcttcattct tagtctgacc taggtgtgag aattaggtca ggggccatga 43500
 tatattgtg gtgactcaaa ccaggccttt gtttactaac tgggagattt ttacattgta 43560
 agaatcaagt aggatctttg cccatgtatt ttggtcttaa gaacacaaat gatatggctc 43620
 tatgactgg aggaacacca gggtccttgg tctcacgctg atttagataa aacgactgtc 43680
 aggcctctga gcccaagcta agccatcctc ccctgtgacc tgcacgtata catccagatg 43740
 gctgaagta accaaagaat caaaaagca gtgaaaatgg cctgttcctg ccttaactga 43800
 tgacattcca ccattgtgat ttgttcctgc cccatcttaa ctgagcgatt aaccttgtga 43860
 attccttct cctggctcaa aacctcccc actgagcacc ttgtgacccc cgcccctgcc 43920
 taagagaa aacccccctt gattataatt ttccactacc caccacaaatc ctataaaatg 43980
 gcccccccc tatctccctt cgctgactcc tttttcggac tcagcccgcc tgcacccagg 44040
 tgaaataaac agccttgttg ctacacaaaa gcctgttttg tggactctct tcacacggac 44100

<210> 64 <211> 16869 <212> DNA <213> Homo sapiens <400> 64
 aagcttttagt agagatctca aaaatggttg gatggtagca aattactaag aactctcaaa 60
 gtttctaaag ccttagtttc agcttgctag aaaacctatg ttgagtatta tggctagttc 120
 catagttgag ttgggaaatg tctttgagga gacacttttt cactttgtat tcatctgtac 180
 attttctggt acttgcatc tgtcatgctc aggctattag agcaggtaca tttttataac 240
 tggaatgttt atgtgtagtg aagctctgag aggactttgc attagatctc agcagcataa 300
 tcagaagggt gtcccttgtc tcagcaattt ttaagctaag agtagcagaa attgcagtgg 360
 aaatagactg ctttgccaca acattcagaa aatcatttat ctttttattg cagttcttgt 420
 caccaaaca tacattttag tacttctcaa attgcagaac tctcataggg ctgggaaaat 480
 gcctgtagac acatacatat tatgaatgtg ctaatgtttt ttgtattttc atagcccatc 540

aaagctcctg	agtcagtttc	cactataatc	actgcagaat	caatcttcta	caaggtaagc	600
ttttgtagag	ttactgaagg	aagagttggg	cctagtgggt	aatgtgccac	taaaatgttg	660
gattagtcta	aaggtctctg	ctactcttta	tttgataag	gtgtgattat	actttttgtt	720
cccttcttag	ctgttttccc	ccataagtgg	ctgttattaa	aacatctcat	ctagagctga	780
agtgggagga	gaaagtgcct	actgacacat	gatgtgagga	tcttaagtat	tttttttttag	840
tgtagattgt	aggaattatt	cttaaaatgc	tgattgtata	gtgtggagcc	atggaagact	900
gagccgttag	tgcgatggca	ttgaagaatg	agaaggacag	agacaggatt	tggactagta	960
gaggttgtcg	actgtggtgt	caaatgggta	gagtagggcc	agagattcta	aaatgccttt	1020
aagtggagtt	gagctgagta	agggcagtag	tgaggattaa	cacctactag	aaattcatag	1080
tgagaggaat	tccaagatgt	tttgataaaa	gaatgaggag	gtcaggtttc	ccagggccaa	1140
agtcctgaa	catctgatac	ctcagtgaga	gaagtgacag	attgttgtgt	ttaaaccaga	1200
agtcttagga	aaggaattag	aacatagacc	cccaaggctc	ggcaggcctg	gcacggcaca	1260
ggcagcaacc	attgaaggct	atttggtgtt	tgggatctg	aactgtcatt	taggggacag	1320
tggtgtgagt	tagtacttta	tacttgacco	aggtggactg	agaaactcaa	gtgatgatgc	1380
cccttaagtat	actttttttt	aagcccacaa	tctatatagt	cgaagtctgt	tcctcccaac	1440
aggggtacac	tggcattcct	cagcagggct	gggaaaaaacc	aacaacaaaa	aaagtctgta	1500
gcaggcaaaa	catctctctt	atttttccaa	catttaatac	attgttaata	aaatatctaa	1560
agtttagcaa	acagttgctg	tgtatcagtg	gctgagcatt	ttgcatgctt	tatttcattc	1620
agttcactct	atgaggtgga	tactactatc	cccatTTTct	agatgagaac	attgaggcac	1680
agcgagggtta	attaacttgt	ccaagatcac	atagccaaca	agtcatggag	tgaggcagtc	1740
tcatgccaga	gcttaagcct	agagcatagt	tcctggctct	acagcttttag	caagtgactg	1800
gctatgtgac	gaggaccaac	ctctctaatt	tctcatctgt	aaaataggaa	ttgtaaatat	1860
ttactacctc	agtgggtcaa	atgaaatcat	atgtgttaag	cacttagcag	agtaagcact	1920
caatgaatag	taggagttat	cacatcttcg	tatttggtgca	ttaccttcac	agtttacaga	1980
ttaaggccag	aagcaacttg	ttgagctacg	ggtttagtgt	actaacagtt	tccatgtgtg	2040
tctccatgga	aggggtgtgtg	ggacctgtta	ttgtgactgt	ctgtactttc	gtattgttgt	2100
ctgccacca	tgtttattaa	atgataagga	caataatgca	acaaagtagt	caagtaatgt	2160
tgcaaatgcc	cagtattgta	gtggctatca	cagcagtgcc	actggcaggc	agcaccatgg	2220
tggcaagttc	aagaggtcac	tgccagccac	tgagctagag	cccagatcag	gcatgcaaga	2280
ggagcctgag	tgggagccac	tggggatcac	ggccaagagt	gtgaccaccc	aagaccacaga	2340
atggctgagt	ggcctccctg	gagcatggca	gtggcagaac	aactccatga	actcagatct	2400

ggtgatgcct	aaactagtgc	tggtctcgtg	tggaacctt	ttctctacca	gaaaccttga	2460
atcctctcag	caaagtagga	gactactcag	atcagtgcact	tagtcctggt	tggtgttata	2520
tatgtgtaca	caacacagca	catattaata	aatacctact	atgtgccagg	cactgcctac	2580
cactggaatc	tttactaag	acattgtttt	tactttgcat	ttctgccttt	acactatgaa	2640
agtagatggt	ttggattcat	attcattcag	catacatctt	aatatgctgt	gttatgcata	2700
gtaagcctat	gataagcaag	tattctcatt	tagaatttgg	gaatattgat	tatacatgtg	2760
gacaaacaaa	ccataaatgc	aaactattta	tatgataaat	aactttggac	tgatggctgg	2820
gaggaaggac	cagctattga	tggttaggaa	ctagcaagta	gcggactgtg	gcctgcatag	2880
accagaccca	tccgtagtga	tccagatgaa	acagccaccc	tcagacactt	ggataaaggg	2940
tccaccagga	aaaaactcct	ggcctatcag	gtgctatggt	acagttcagt	tactggaagt	3000
atttccctcaa	aagtgttttt	atggttgagg	tacacattcc	tacagcttta	cctgctgcca	3060
agtcctggt	tcaaggggaag	cagcaatgaa	ttacactggt	cccgtagtca	aggacagtat	3120
atcttaacca	gaactatacc	cacttaagga	ggtgctggat	gtcataaaga	tttggatcaa	3180
cgattatggg	tggtcagagg	agagattatt	tccagctcaa	gaccagggga	agaggacata	3240
ggatggatac	cagagtcata	gggaggatct	aacacaggac	atgtacacat	tagttagttg	3300
ggtataaagt	ggaacagaaa	tgaatgagac	acaaagcctt	gaatgccaga	aataactagta	3360
gcctgtttgt	ggaaggatat	aaaactcaac	tgggagtgga	agagaaaggc	agcagtgagt	3420
ctaggagatg	tacagtaggt	tgaggtaaac	atatcctgaa	gactataatc	caaagattat	3480
ctttgggtttg	aatttggtttt	ggtttgaatt	catgggtatct	attttctttg	agtggatggg	3540
tggggagggt	ggcatgtaga	atgcattctt	accaaatacag	catgattttc	aagacagtac	3600
agagaaaaga	ctgctgagct	gatgtaggag	ctttggctgc	agtctctatg	gctttcagca	3660
agccgtttta	ccttactact	gcttcatgac	tgtggctaac	aaagtaggga	tagtacggag	3720
cacagaggat	ttttagggcg	gtgaaactat	taatactctc	tttgatgat	actataatgg	3780
tgggtacatg	tcattataca	tttgcccaac	cccacagaat	acacagcacc	aagagtgaac	3840
cctaattgtga	actctggtct	ttgatgatgc	tatgtcagtg	tacgttcatc	cgtgtaacaa	3900
gtgtaccact	ctagtgggtg	gaggggttat	tgataatagg	ggaggatgtg	catgtgtggg	3960
ggcaggaagt	atatgggaaa	tctctctact	tctgctcaat	tttgctgtaa	acctaaaacc	4020
tctgtaaaaa	ataaagtcta	ttttttaaaa	agtggggatg	gtattacggc	aatataaaat	4080
caaaataactt	tatgaacaaa	tcttttctcc	agatgtaaac	tgtcatatat	gcaccctcgt	4140
atgtgtatgt	ataattttca	ttcaaactgt	aaacaacttt	agaattggca	ccaaacatat	4200
aaacactgat	acattagact	atctcgaaca	ccttttactg	accactttga	aaacttgctt	4260

äcctattaag gttcattcat agctgtgatg ttctatTTTT attttcaatg tgggattatc	4320
ttctgtttcc cccagggagt atattaccaa attggtgatg ttgtttctgt gattgatgaa	4380
caagatggaa agccctacta tgctcaaatc agaggTTTT tccaggacca gtattgcgag	4440
aagagtgcag cactgacgtg gctcattcct accctctcta gccccagaga ccaatttgat	4500
cccgcctcct atatcatagg taagtttgac aaatggcaca ggTTTTTTTT taacttagtt	4560
aactctccaa tattatgtaa aagagtgtgt tagtcagctt gggctgtcag gacaaaatat	4620
cacagactga gtggcttaaa caacagaaag tcactttctc acagttgtgg aggctgaagt	4680
ccaacatcaa ggtgctggca acacggattt ctggggaggc ttttcttcct ggcatataga	4740
tggtcacott cttgctgtgt cctcacatgg cctttcatgg agtgagagct ctttgggtga	4800
tcttcttata aggacacat ttctgtcaga tgagggcccc acccttatgg tttcatttaa	4860
ccttaattgc ctccctaaag gtctcatctc caagtacat cacattgggg attagggctt	4920
caacatataa atttggaggg tggcgggggg ggatgcaatt cagtccataa caaaaaaagc	4980
agagagtatta ttaagtacaa aaaaattaga gagctttata gaaaatatga ggcattttat	5040
gtagctggag tgtgagtgt atcagttatt ttgagttaga gcaatgtgca tctactaaga	5100
agtggatatgg ataagatttt tttggagtga cccaggggta aactgtacta caagaatgta	5160
tggtcagga actaggttat ttaggttact tatttataca aacctattca aaaataattt	5220
aggaaagaac tatcccagtt atcccatact tgcaaattct caatatgtgt gcctctgcat	5280
gctacacatg tcatcttagg cctttatagt ataaaggctg atagttgaaa tggcagctgc	5340
tggtgttttg ttaatttcaa agctgccaaa acagttgtga gatagactca caagaattta	5400
ctgattaata caatttttaa agttttcaga tttttacagt tacttcagac tttttatctt	5460
tctgcagtga gcatgcatca ttacttttgc atcctgagaa caagcataag tgtgtttttg	5520
gagagaactc cagggacaaa taatatacca ctgttattct cacctatatg tcaagtttga	5580
tacattacca aacaattcta gccttctgct tataagtata tagaattttt atttacotta	5640
tctatggatc aggatctcag cagaggcagt gatgtatcag aatcaccttc gggattcctc	5700
tactgcctcc tctttctaatt ccccagattc tgatatgcat ccttgtccta cagcgaggca	5760
gcatggcatg aggtcagaac accagttctg gagccagact gtctaggttc acagcctgcc	5820
atttaccggc catgtgactt tggcaagttt cttagtctct cttgcctcac tttcctcata	5880
tgtaaaatgg gaataataat agtgcctacc tcagaagggt gatgtgagga atgaaggat	5940
tgatacatgt aaacttagag cagtgtgggt acaaaataaa catgatgcaa gtgttcaatc	6000
actgtttttg ggagaatgcc atattcttta agccgttaaa gaagaaaaaa tgattaagaa	6060
taatttcaaa gtaatgcatg tttcaagggc taatgccagg ttgctcccag agtgggtctct	6120

cccagtgtct agaaatttta acatcttatg aaaatgatat atatgggtcaa aaatgtatatt 6180
 aacctttccc ttggctgcct tccagggcca gaggaagatc ttccaaggaa gatggaatac 6240
 ttggaatttg tttgtcatgc accttctgag tatttcaagt cacggtcac accatttccc 6300
 acagttccca ccagaccaga gaagggctac atatggactc atgttggggc tactcctgca 6360
 ataacaatta aggaatcagt tgccaacat ttgtagtcca caaattaaaa ctgggtttcc 6420
 aggcctgggtg tgggtggctca cgcctgtagc cccagctatt gcaccactgc tctccaagct 6480
 gggcaatgga gtcagattct ctttcttaaa aaaccacaaa aaaactggat ttccagttct 6540
 ctaatatct tagtaccaca agatatgtca taggtatctt taaatgaaat tcttagctgg 6600
 aaaagtgact aaaaagtttt tctcctgcta cctagtaata aacaaatcat tgtttattac 6660
 tggctactta gaaaattaaa agggataggg ccaggcacag tggcttatgc ctgtaattgc 6720
 agcactttta gaggccgagg caggcggatc acctgaggtc gggaagtgga tcgcctgagg 6780
 ccaggagttc gagaccagcc tggccaacat ggcgaaaccc cgtcgctact aaaaatacaa 6840
 ccattagcca ggtgtgggtg catgtgcctg taatcccagc tatttgggag gctgaggcag 6900
 ccgaatcgcc taaaccagc aggtggaggt tgtagtgagc caagattgca ccgctgtgct 6960
 ccagcctggg caacagagt agactcttgt ctcggaaaaa aaaaaaaaaa aaaaaggctg 7020
 ggcacagtgg ctcacgcctt taatcccagc actttgggag gctgaggcag atggatcgcc 7080
 ccagggttggg agttcgagac cagcctggcc agcatgggtga aaccctgtct ctactaaaaa 7140
 ccacaaaaatt agccaggtgt ggtggcgcac acctgtagtc ccagctactc gggaggctga 7200
 ccaggagaa ttggttgaac ccaggaggcg gaggttgagc tgagcagaga tcgtgccact 7260
 gcactccagc ctgggtggac agagcaagac tccgtctcaa agaaacaaac aaaaaattaa 7320
 aagggataga atataatgaa atatattttg aacttaaatt atattctata tgtgtatctt 7380
 cctaggcaaa agctgtaatt tccagagaga ccattaggaa caggtagtat ctatttttct 7440
 ccattatttta tttctagaaa ctcataaaat ggattgtatt tttctataag aacaaaatat 7500
 taattaaggt atagatgact gaccaagggc ttaatcaaatt aaaatgacta acagcatcta 7560
 tcataaagcc acacaagcct tatgttctca tctcaaaaat gctgtgacag ctttttggct 7620
 gctttaacca taagaaaaat gattgggtga tgattttatt agcccaggct tttaaaaact 7680
 ttcacttagg ccacgtgcgg tggctcatgc ctgtaatccc ggcactttgg gaggcctgag 7740
 tggatggatc acttgaggtc aggagttcag gaccagcctg gccaacatga tgaaaccctg 7800
 tctctactaa atatacaaaa attagttggg tgttatgggt catgcctgta atcccagcta 7860
 ctcgggaggc tgaggcagga gaattgcttg aactcgggag gtggagattg cagtaagccg 7920
 agatcgtgcc actgcactcc agcctgggtg atagagcaag actgtctcaa aaaagaaaaa 7980

aaagaaaaaa ttttaattta atccttctgt agaaacaggc attcagaacc attccattga 8040
 tcttaataaa gctgctcttt actgtttcta gtcaaaaatg agacttcgat caaaccataa 8100
 gattttatac tgcagatagt cagcttcacc aaagccgcag aggaaacatg tgcagatcag 8160
 gcttctctgt tgatagtctc ttgactacca ttaaaacgaa tattgggagg tcatgaaagt 8220
 cattggtagg ccattagcat tgatatcttt aaaacatcta ccctaaacca tctgctatgg 8280
 acccataata agaggcctgt tgtatatgaa attgtctaga attcagggtgc aggtctttgc 8340
 cggttaagta agggagcaac acgtaaaatg ggagaggagt ggggtgtact cacttgcctc 8400
 ctcttttgtc ctgatttaac cagcattttt caaccctggg aaaatttgca gaatctaagt 8460
 tgattgtaat gattttgagc tgcagcagct ttaactctta ccctttttcc acatagttat 8520
 ggtgtttgag ttggaaagaa acaactatag gtagctacac gtacataatt atctctttat 8580
 tcacaaaggg tatagtaaaa ttgattgtaa ataactttct aagtgccaat attcaaaact 8640
 ttggtgattaa aatgtatttt tcaccgtgca tttactttgg atgtatttat ttcatttaaa 8700
 ctatttaaat ggggctcttt aacaaaaat ggtatttaaa accaaaacag tatcgtactt 8760
 agaatattgga gtagaggccg ggcacagtgg ctacgcctg taatcccagc actttggaag 8820
 gctgaggcag gcggatcacc tgaggtcagg agttcgagac cagcctggtc aacatgaaac 8880
 ccgtctcta ctaaaaatac aaaaattagc tgggcgtggt ggcgtgcgcc tataatccca 8940
 gtagtctac tcgggaggct gaggcaggag aatcgctgga actcaggagg cagagactgc 9000
 agtgagccga gatcgcgcca ctgcactcca gtctgggtga cggcatgact ccatctccaa 9060
 aaaaaaaaaa aaaagatttt ggagtagatt catcattaat aagtaacaga ttttaggaaa 9120
 atcaaaaaat ggctaataaa atgaacacaa tgtaaaacat ttattaaaat gtagactttt 9180
 aaaaatctat aaattgatca tctgtttata aattggcaga tggttgtgta ccatctttta 9240
 aaataaagat tgaatttcac ccagtgtgat ggttccatt gcttatattt ctctgctga 9300
 ggccggacct gatatggccc tggctctgtg tcccagcctt gtttcctcat taccactaaa 9360
 atctttcccc tgtatgcccg cccaattttt ctggctctga gtccttggtc atactgttct 9420
 ctccaattct accttccaaa ggcctttctt aacaccttcg gattctttct ttgagaactt 9480
 tccagattcc catgcctttt tggaatcaat ctctatccta ttgtcatcac atttaagttt 9540
 ctacttccat catcctcact cctatccctt tggctctggg atgacaggga tgctgtgttt 9600
 tatttactca tctttgtaac ttccacataa cctaaccctg gttcttgctt atgggagatg 9660
 ctgattgtag ggtctgagtt agatactgtt aactaaaatg cttgttgata ttttagttat 9720
 taattcatat taactttggc tgaaactttt aaattctatt gtgaatagtc aagtaaaatt 9780
 tagattgtta cattctgggt tagtattaga ttgtttttta gattgtttta aacaagatgt 9840

ttttaagatg	agtttttaaat	agttctctta	acacaaataa	agcttaatat	gagtatttga	9900
aggaaattat	cccaaaccat	tccagttcct	ggctgtgaaa	ggcttttcca	ggcctaataa	9960
gttttccact	tcagccgtaa	gtaggtgaaa	tcaaataaac	aatagaggga	aatgtattta	10020
tttgctttat	acacatgcat	gtgtgttggt	tctacatata	aacattgcac	acgcttagaa	10080
tgaagtttct	gtcatgcccc	gaaaaggag	aggcattttt	gtggattttg	tctggctgcc	10140
ctggggatgt	ttgaagaact	gtgctgttta	cttcatacca	gggtgtgtgag	ccataccttt	10200
ggtaggaggg	tatacctcct	acaccaaga	aatataagcc	aggagaaggt	ctgtgccaag	10260
agaaggaacc	caaatagccc	acaagagggt	ggccattaat	tattgggtca	gatgcataaa	10320
tgcacagtaa	tttattttaag	cacctcttaa	tggtgaccca	caaggaagat	tgctcgtagt	10380
agcggaaaag	ttcacaataa	ataagagaaa	aaagcagaat	gtagaactgt	atgatagcaa	10440
ttctgcaaac	aagaagcatc	ttttataaaa	gatggaagga	gcccaggcac	agtagctcat	10500
gectgtaatc	ccagcacttt	aagaggctga	gggtggaggat	cacttgagct	gcagtgaccc	10560
atgattgtgc	caccactcca	gcctgggtga	tagaagtgtg	accttctctc	aaaaaaaaaa	10620
aaaaaaaaaa	aaagacggaa	attcctccag	aattttaaca	tgtcaacaga	ggttttctgc	10680
agctactttt	ttcagcttta	tacttcgcag	tattttccaa	attttctcta	acaagcagta	10740
ttttccaaat	tttttacaat	aagcacacac	acacacacac	gtttgtttgc	ataagtgtcc	10800
actgggtggg	gaacaaccgc	tggtttttag	tctatacata	tctagaatat	tttataaata	10860
gtagttctta	aacccttgaa	aggagtgtaa	tgaccagctg	agaaaataaa	gtcagtgtatt	10920
ctattatttt	cctatatatt	catcatgatt	ctaggaaaga	acttgggagt	gacttccttc	10980
agcttcagcc	actcctgggc	caggcgcatg	cttagctctg	tggtaaaggt	caccagcttc	11040
ttctgcaggg	tgctgtatc	atctgaattg	gaggtttggc	gagggttaaga	gactgatgta	11100
ggttcaagtt	tttctttcct	gtcctccact	tgaaatctgt	cttccttcc	agactgcctg	11160
cgctgctgac	ttaaggcccc	aacaccaaac	acagaagcaa	cagccttaca	cagagtgttc	11220
agcaagctcc	aacaattgtg	taaggtaaag	tttcctttat	agattccttt	tctatatcgc	11280
tcctagtggg	tctgtttctc	tgatcgaatt	ctggctgata	acagttgctg	agactctgaa	11340
agagaaggca	aggaactact	gtttctcatt	ataaactgtt	tagaattatt	tggccatctt	11400
tttgctatga	atatgtagt	ctttgataca	tttttttaaat	caaaaagtaa	tgaaagagat	11460
cacataggga	aagatagatt	ggattatttt	taaagtttat	atactaaatt	gaaaagcaaa	11520
gaataaaaat	ggagaaacag	ctccctcatg	tggtgtgttg	caggaagctt	ccattcctct	11580
ctgtgggcct	ccacaggttt	gtcacagca	aatggtccgt	gacagaaaga	cgcaagggca	11640
gttgcacca	agatggaagc	caccatcttt	tctataacct	aatctgaaag	aaggacata	11700

ccagcacttc	tgccatatgc	tggtgggtca	cacagaccaa	ctctggtaca	gtgtgaacac	11760
aggaccacac	aagggcgtga	attccaaggg	cagagaccac	tagggaccac	ctcagaggca	11820
cagaggggaca	ccctatccag	ctgggtggcca	atgtaaatta	acatagcttt	ttagaatagc	11880
aatatgtatc	tataatctta	aaagtattaa	aagtacttct	tgatccagta	atttcatttc	11940
taagaatcca	tgctaagagg	atttaaaatg	tggaccaaaa	aatgggtata	aaaagaagtt	12000
gttaacagta	tttaaagttg	tgaaaaacca	gaaacaatct	aaagggtcaa	caataggaaa	12060
atgaattttg	atatttttct	aatagaattt	tatgctgtca	tcagaaatac	cattttacaaa	12120
taatttttta	taacgcaaaa	aaaagtttat	aaaatgttta	gtgtaaaacc	tggacacaac	12180
tacataatga	ttctgatttt	gtaaaaaaaa	aaaacaaaaa	cacacacata	tacacatgca	12240
tacatatgca	tataaagaaa	actggaacaa	acaaaataac	aagcatagtt	ggaattacag	12300
tcattttaat	attcttttat	cttttaaaaa	ttttgaagtt	tgtattacta	gcattccacta	12360
cttacgtagt	caggaaaaaa	atacaacttt	aaaatagata	tttaggtcca	aagatggtaa	12420
tgtaaatggg	gttacaggct	gaatgtgtgc	ctgatcccca	tgccccaagt	tcatatgtta	12480
aagccctggc	ccccaaggca	atgggtattag	gggagtaggg	cctttgggag	gtaatcagat	12540
ctctacgagg	tcattgagggt	ggagcccgca	tagtggaatt	agtgtccttt	taggaagagg	12600
gaacagagcc	aaagccttcc	tttctctcct	cactatgtaa	gaagacagcc	agaagggtggc	12660
gaacagccagg	aagagagctc	tcaccagaac	ccaaatctgc	tagcaccttg	ctcttggggt	12720
ctcagcatcc	agaactgtga	gaaatgaatg	tgtgttggtt	aaaccactca	ggctacggta	12780
cttgtttgca	gcagcccaag	ctgacagaga	tagaaacaac	acaaggaccc	atcagcagac	12840
gaatggatga	tcaaaacgtg	gtgaggctgt	gcagtgggat	attattcagc	cgtagaagga	12900
atgaaattct	gatacatgct	ataatgatga	accttgaaaa	catgttaatg	gaaataagcc	12960
aaacttaaaa	ggacaaatat	tgtataattc	cacttatatg	agttagttag	ctagaatagg	13020
caaatttatgt	catagataca	gaacattaga	ggttaccagg	gttgtgggaa	gaggggtatt	13080
gtgggtacaa	attttcgggt	tggagtgatt	ttgaaaaaat	tctggaaatg	ggtagtgaca	13140
gtagtcaaca	tgatgaatgt	acttaatgac	actaaattgt	acacttaaaa	atgggttaata	13200
ctgggctggc	gcagtggctc	atggctgtaa	atcccagaac	tttgggaggc	caagacaggc	13260
ggatcatgag	gtcaggagat	tgagaccatt	ctggctaaca	tggtgaaacc	ctgtctctac	13320
taaaaaataa	aaacaaataa	aaaaaaaaatt	agccgggcat	ggtggcaggc	acctgtagtc	13380
ccagctactc	gggaggctga	ggcaggagaa	tgggtgtgacc	tgggagtcgg	agcttgacgt	13440
gagctgagat	cgcgccactg	cactccagcc	tgggcaacag	agccagattc	cgtctcaaaa	13500
aaaaaaaaaa	aaaggttgat	acctgggtgc	ggtgggtcat	gcctgtaatt	tcagcacttt	13560

gggaggccaa	ggcaggcaga	tcagttgagg	tcaagagtta	aggaccagcc	tggccaacgt	13620
ggcgaaaccc	catctctatt	aaaaatacaa	aaattagtcg	agtgtggtgg	tgggtgcctg	13680
tagtcccagc	tgctgggagg	atgaggccta	ggaattgctt	gaaccagga	ggcagaggtt	13740
gcagtgagtt	gagattgcmc	cactgcactc	cagcctgggg	gacagagcga	gacttagtct	13800
caaaaaaaaaag	gttaaaattg	taagttttgt	tatgcatatt	ttaccataat	ctttaaaaaa	13860
tagatatata	ggagataaag	tcaacagaat	ttaataacca	gttgtaaata	gagactgagt	13920
gaggaggatg	aattaaggaa	gacattgagt	acaacttttt	ggtaggtgaa	aaactcttaa	13980
aaaaatacgt	gggcaaagat	cctacttgat	tcttataatt	taaaaatctc	ccagttagta	14040
aacaaggcta	ggtggagatt	tgcatgtgat	gtgagggtgtg	tgttctgttt	tgtaatgtga	14100
ggactgtgag	ccatctcctg	gacttgaata	tccattagat	aattgaaaat	acggatttga	14160
gaactcagga	gacgtgcaat	gcagtaacaa	aactctgcac	ctagttgatt	tctgtctcct	14220
aaatttaatgc	ttttatggga	caaactgtta	ggcagggtggg	caagatggac	agccatattt	14280
tggtgggttt	ctggcctgtg	ggccagcctc	agtgtctact	ctgagggtcat	gtccaaactt	14340
agaacacatt	caggcctacc	acagtcaagg	ctccctttct	caactctagt	cctctgcaca	14400
atattatccgaa	gcctagaaat	aataatcacc	tgtccttggtg	tcttgcattha	tgaaagccta	14460
ggaaagggcc	ttgggaatta	agaagaatgg	aaaaactggt	ctaactgctg	catgcttcag	14520
gtgcagggg	aatcactgaa	atggggacag	gccataaaaag	gacaaccaga	agagtggcctt	14580
gagcaaaggc	atcgtttttc	agagcaagct	agagaatcct	gccagcgtcc	tcaggcaggg	14640
ccctggggca	cagagggttag	gcaagggagt	gtcccagcat	gttgatgccc	tgagcatcag	14700
aaataatgcca	tagaggagct	tccaaagagt	tcatttcagg	ttttgtaagc	cgaacatttc	14760
taggcaaata	aaatttgatt	ttgtgaataa	agcttgtttc	ttcaactcca	gtgcagattc	14820
tcatagattg	atagtggcct	gtgatccaga	taaagaaaac	aatttttcaa	agattcatat	14880
tctttgtaga	tgtacggatt	tagagaccat	ctaatactaac	tccctcattc	tacagatagg	14940
aaaaatgagg	cctaaagaag	ttaagaaaat	accatggaaa	tgtcactgct	gaactgccat	15000
acgtaggatc	cgaaagaaat	tgggtaaatg	ctactgtgag	aaatacagta	ctaggtccaa	15060
agaatctaata	acaaattaaa	aatctaaatg	ttattttctaa	agcatccctg	cacatggctg	15120
aacttacata	gtttcatttt	ctttcttttc	tgttgaagaa	gaggcaattg	gctgggtgca	15180
gtggctcatg	cctgtaatcc	tggcactttg	agaggccgag	gcgggtggat	cacctgaggt	15240
caggagtttg	agaccagcct	ggccaacatg	gtgaaacccc	atctctacta	aaaatacaaa	15300
aattagctgg	ctgtggtggc	cgctgcctgt	aatcccagct	actccagagg	ctgaggcagg	15360
agaattactt	gaatctggga	ggtggagggt	gcagtgagcc	aagatcacgc	cattgcactc	15420

tagcctggat gacaagaggg aaactccatc tcaaaaaaaaa aaagaaaaaa agcaatcact 15480
 aacctgtgtt gtttattaaa catgacagac tggcatgaag taattaccaa actgtaaaca 15540
 aaaaagctac aatctgccag gcatgggtggc tcatgcctgt aatccccac cttgggagggc 15600
 caggttgggg gatcacctga ggcctggagt tcaagactag cctgggtcaac atgggtgaaac 15660
 ctctctctta ctaaaaatac aaaaattagc ccggcgtggg ggcacatccc tgtaatccca 15720
 gttactcagg aggctgaggg aggagaatca cttgaacctg ggcagtgggg aggttgacagt 15780
 gagccaagat cgcaccgttg tactccagtc tgggccgaca gactgagact cgggtctcaa 15840
 aaaaagaaaa aagaaaagct acaaccttaa tctcaacttc tcataacatc atctctactt 15900
 ctgattagaa gactggaagt ggggaggttt attacaaaaa gactgttata ccttacacac 15960
 ttctcccat gaatagtga ggtgtgagt aaaaagacag caattttatt ttttttttga 16020
 aacaggttct tgcactgtca cccgggctgg agtgactgt tgtgatcact gctcactgca 16080
 gctccacct ccaggttca agtgatctc ctacctcagc ctctgagta gctgggacca 16140
 aggttggtgca ctaccatgcc cagctatctt tttttaagag atgggggtct actatattgc 16200
 ttaggctagt tctcaaactc ctggcctcaa gcagtcctcc gaccttgagg tcccaaaggg 16260
 ttgtgattac aggcataagc caccacaccc agccagcagt tttagaataa aggggtgaagg 16320
 tctgtttggg gaaatataat ttaaaaaaca aaatcttctc tcaaccaga aatcctctcc 16380
 tgaaggcag tagagaaaga taagctttat tattgaataa aaattaaatg agaatgtgat 16440
 gcacatcaca ggcactttgc taagagatca caaagacaga aggaaatttc accattttgt 16500
 agagccaagc aggtacagcc cattacatgt atgttttcga gataaatagt cctcaactaa 16560
 gagaacttga cagcaccact ggtcacacag ttcatcttaa ctttacctga taattgatgt 16620
 gaccacttgt gttatctaag atatcaactt ttcgggggtg ggggagtgtg gaaacaggag 16680
 ttacttttat agcttggtgc aaggtactca ttaagattag gctgttacc tccacagaa 16740
 actggaagat aggtatgcta tctggtaatg ttacatttc ccagatcctt gagaaagaca 16800
 ttcctaggtc ataaagctga caaaggctg attcagtttt taaatatata tatctgtata 16860
 tgtatttca 16869

<210> 65 <211> 15000 <212> DNA <213> Homo sapiens <400> 65
 gatctcttga tcccaggagg tcaaggctgc aatgagctaa gatcaagcca ctgcattcca 60
 gcctgagtga tagtgggaga cttgtctttt aaaacacaca cacacacaca cacacacacg 120
 agggcctttg accactcttg agtagaagac tcgagaagaa caaagtagaa ggccagagaa 180
 gaacaaagtt acttgaaaga tctcttatta aagagaatgt acaagctatg aaaaaaaaaa 240
 aacacacaca cacacacaaa cctcatctgg aatgaaaaaa acataatgca tttggtttct 300

ggttccttag gctgttatgg aacaaccaa gaacattatt ttggtttctg aggtcagaac	360
tattttattc cctcaagca cactatgctt atggtttgag ggagaatgag aaataggaaa	420
ctaggaacag gctgaaatgg tctaattcttg accatctaatt tctgcagtgt cttattctca	480
ttctaaaaga gaatggttat attcgctggt ctagcataaa aagtaatgat aaaaataaaa	540
gatcccgat taccagacaa taatccccta gactgtttta atgcttggtt gagtatttgc	600
ttatgatctc agactttaaa agatgggtctc cccctatggt gaagcttggt aattatgtag	660
gcatcattaa tgtctgttta cttatcaaaa ttttatcatt gttagttgta ttactacttg	720
acagtccaat ttatttaatt gaaaagattg gttaacattt tatagtcaaa gtaattgttt	780
cctgtgtttt ttctgttta ggttattgga gtgatgagta aagaatacat accaaagggc	840
acacgttttg gacccctaatt aggtgaaatc tacaccaatg acacagttcc taagaacgcc	900
aacaggaaat atttttggag ggtaagtaag ggaaatttct tcagacccat taaatgttag	960
gaaaaaatgg agctaaaaga gctgggtggc tcacctttct catcctgtgc tgagaaatgc	1020
tggggctcac ccataagtat ccagcatccc catggacaca gggaattctg aacaaatgtg	1080
tgaaaccga tgaaatgtct ggctgtagg tggtagtga tggagatacg ggctatatgt	1140
gaatcttgat ttttgcaatt cattagagct ttgtaatgaa aggaaacagt ttgttgcttg	1200
gtttaaggat aggttcattt gcatttctcc gcaaggaagt agtaatgagt taccaagcct	1260
tgatttcac ccttttttga tttcttgctg acttaacttt aattgaatgg aagagttatc	1320
gcaaatgaat tatctttttg gttttttttt ttttgagatg gagtctcact ctgtcaccag	1380
gtggagtgat aatggcatga tctcggtcca ctgcaacctc cgcctcccag gttcaagcaa	1440
ttgtcctgcc tcagcctccc gagtagctgg gactaagggtg cgcgccacca tgcccagtta	1500
atttttgtat ttttagtaga gacgggggtc cactatgttg gccatgatgg tctcgatctc	1560
tggacctcgt gatccgcca ccttggcctc ccaaagtgtg ggaattacag gcaagagcca	1620
ccgcgccag ccaggaaatga caaatgaatt accttataag taaatgccat taaggaagga	1680
tagctggaag atgggttgag gggaatggag gaccacagaa ctagtcctat ttaaatacat	1740
gtgcatggta aaatgattcc atttgacaat aggttaatta tctcatagca taaggaaaat	1800
gcttaacagt catatgcaag atgataagct ttcttatagc atccaaccaa aagatctagc	1860
cagtacaatt tcctttgcta tattaggggt agaaaggccc ccagaggtga accaattaga	1920
tggaatcctt gaataaaaca ctggattagc agtgaacaga aaaaagtcag attgctttcc	1980
ttcttcccat agatgtctca gggatattta gtttcctcag aagataaaga atttagtaag	2040
cgtttttttg tgcatactta catgaaatgt acattatttg aattctttaa aaagaaacag	2100
ctgcatgata acaaaaattg tgttatgctt gcttttagctg gtatttttgc ctagaacgat	2160

tatatcggttc ggacaagaag ctattcctaa gaaacaatat ttttaatcca ggaagttttt 2220
 catttttaga aatttatctt actatttccc aagcaaaaga gggtagttac agattcacta 2280
 agaatcatgt gctcacaatt tttatttaaat aattattcct ccttaaaata tattaatcac 2340
 ctgacttaca atgggtggaac catgagtgca tttttgcctt tattgtcaat aacgtcttct 2400
 cagaagtgag ccacaaagggt gcatagttct tggagttaaa ggtctgaatt aagacaatcc 2460
 agcataagtc tcattaatgt gtgattattt tgagaaaagg caagaagtac ctaagaatct 2520
 cccctcact gtccagttcc ctgtttcatt taaagattca ctgtaagtaa ctgaaaggct 2580
 ttccttgga ggatttattt gaatcagtct ttcacatgca aaggatattg tagaacatct 2640
 cgtttttgct ggcaggaata tgaacatctg ttgtgaggaa agaaaaagtt tcatgcaaat 2700
 tacactgcc aagaagggt gttcaagttg agaaaccagt gacatttctt gtaactgtac 2760
 tatgaatcag cgcattttta tcttctagat aatatatgga agtgcaggaa ggtggttagga 2820
 acggtgttc attttacata tgcgttattt tattctgtgt gagtgacttc atggcaccga 2880
 gattgctgtt tttaaagtag gatacagtaa attgcagtcc gaggaaggct aactggaatc 2940
 acatacccg tagctttaga aagcagtttc cgcaccagcg aagagtacaa gagcgatgga 3000
 ccccatggt cctggaagtt tgcacatcag agtaaacaaa cttgaaaacc cctcttgata 3060
 gagaattca ccagccttg ttccattttc tcttaacaaa acacaccgca aaagctctca 3120
 caagctgctt tgatgaagcc acatgtattt ccccttcac aatttacagg aagttactct 3180
 taaaagaaag tgattctggt gtttaccgcc tgtgttaaag ggacagagtt cctttttatt 3240
 ctgataacg tttgagcgaa atacagaaac tatctgtaga ctagcatagt cggtagctga 3300
 gtaaggaaaa gcaataacct gctgtccggt gagcacaaaa ttcctgctac gaacagtgcc 3360
 ttactgctgc ttggagactg caagtcgcag atcacactag gtattgactg attgtataag 3420
 gaaatttctt aaagtctaaa gtaaagggtg tacctcctaa aaagagggga agagagaaaa 3480
 ctttgtgtgg aaggataagg agtgtgttta tagtttcagt aagagtgtac gttttaattt 3540
 ttcttcttcc tctgcctctt tgccaagtag cctgagtgca tctgttatcc agaagtagta 3600
 ttactctagg acaaacttca aattcttcat tctgcgttgc ctttaaggaa caacatactt 3660
 tcttcctggt ctttttccaa aaacacacgc ctatggctct gtgtgtggtg ttttagccag 3720
 cctcctcca gataaggggt tcccttcctt cctttgcatt gaaaggaaag tgcaagtctg 3780
 gacatgttta tcaagaggaa aagtgacttc tcagtaatag actgtcaaatt tcgggctgct 3840
 gcccgagtgt tcgctttggt atggcagggt aagttcacct ttgccccacc cagtgtttcc 3900
 aaaaaaggc aaggttccaa gtattcatat gaacaagtgt tacttttagga cttggagggt 3960
 tgggggtgga ggatgtttgc atagttgaag ccttgggcgg ggggtgtagga aacggcgagt 4020

acagaggcca tagaaaaagc taagactcag tttgacgtcg tcagccggct tgggtcttcta 4080
 cccagtgact caaagcacta aaagtcagca taatcggaac tgaagtcagt agcatcgccc 4140
 atttgccatt cactgcagta gcaaaagtag tactctgtgg tgggttaatc ggtttgaggc 4200
 agctccttaa atgaacattt gtgtttcatt tttctgttat tttcccgaac atgaaaagac 4260
 gataaaactg aaatggaaaa ggtaactgac aaaagtgtgc cttacctgtt tccgccctga 4320
 tttctgctga ttcaagacta ttctggctaa actgattgga ttctttttct aactaggcag 4380
 taggggatca gaaatcacac acgggtaccgg ctgtgtttat tctgagaggt gctggggagc 4440
 tttgggtctg acttcctttt acatgcctgt cttctctttt ggacagatct attccagagg 4500
 ggagcttcac cacttcattg acggctttta tgaagagaaa agcaactgga tgcgctatgt 4560
 gaatccagca cactctcccc gggagcaaaa cctggctgcg tgtcagaacg ggatgaacat 4620
 ctactttctac accattaagc ccatccctgc caaccaggaa cttcttgtgt ggtattgtcg 4680
 ggaactttgca gaaaggcttc actaccctta tcccggagag ctgacaatga tgaatctcag 4740
 tgaagtggatt acagaacaaa aaaataaaaa atgccagtaa tgtcggttct gcccttttga 4800
 actaataaca tgttgtttaa ttatacggct ttgtcatgtg ttggatgaag taggtggctt 4860
 aggctaggga ctaggaagag gaaaaacatt ttttgagtcc ctattaacta ttaggaaact 4920
 tgaatcattta aaagtatata tatatatgag gagctacctt gagttttgaa ttcaggatgt 4980
 acaggaaga aatatatgtc caattctaatt ttatccaaaa gcagttggga gaattacagg 5040
 gattgggtcca gacatgctgc gtatgcaagg tatagccctc atctgtggta ctttggcagg 5100
 gcttagactg catcaaaata tttatagatg tacatttgag tgtacagtta ggatctgatg 5160
 tggaaacattg taagatcatt gctagaaaaa ctttgtcata atttttcaat attattctaa 5220
 gtgaataacc gtaaagattt tacatcttag cttccttcct tacagtaaaa aaactatctg 5280
 atctcttgat cagtattata gtagccacct atcactttat cttaacaaat tctcaattcc 5340
 ttaggtttat gtgcttttac ttcttttatt tgattaaaaat tgctgtcatg acctctctct 5400
 gcagagggct gcatcatttt ggtcattctc aagtgatctc tttgagcaat ttaagaattg 5460
 ccataagatt ctaacctctg ctgtaactat ggttggtgtg tcttggttag accactaaat 5520
 cttattagca gttttaaaaa ttattccttt tggtttagaa gttaagacta aatgctgaag 5580
 tttttgtaac ttttggtttt gatatcattt caaacttaag aaaacatttg aagaaaagga 5640
 caaagaattt ccacttacc tttaccagg tttaccagtt attgataagt atatccattt 5700
 gctttaccag aaggctaact tgtttttagtt ctcatthtca cctttgagac atttggaata 5760
 aatatcaatg ttaacataaa ttggaatttt gactttgatt ttaggaccaa tgaacaagcc 5820
 aagtacttac cctagtcata tataatccaa ctgtatggtt atttggtatt cattccacac 5880

ttcatTTTTac ttgatctccc ttaagattgc aagattgtgt ttgcagtttt tctgaaaatc 5940
 tggggctata aaagcatcag gacctcccc gtaggggagg tctgtgtgtt ggggtcctta 6000
 cacaacaggt tacccttgag cttcaggaaa agaactggct ctcagttccc cagttccagc 6060
 ttaatgggtc taattaggtc ctgacaaaa aggtggcagt tcttttccct catgtctctt 6120
 cagcgtccc cgagactctg gagactctgt catatcccta gggctgagcc tcccaggaac 6180
 cattcggctg ttgtggcatc tgtgtatgcc atgccagtg ctgaggacct agtaacaaac 6240
 gacaaatgca caggcacagt ggcatttttg tggaaactcg attccagctg tgcgtctcag 6300
 aagaagcgca cagctccctc ctggctttct taacatagtg agccacttcc acttaaggg 6360
 ctccttacat tccttgagtt taatcattca tggattcaga ggaaagtctt ttgatttttg 6420
 cttttcttta aacagttcat ttgaggtgac ctacccagtg gactttgcac caaccacaa 6480
 gaaacttttt tgcattgctt ccgcaccctg tgccaatcaa gggaagggtt taaaggcctg 6540
 gctgtttttat tcctcaaaga aaggttttgc acagtatttt aaggttcaag tgcttctact 6600
 ttgtgttcag aagcaactgt catatatact gtgaaatgac accttttatt tatccctttt 6660
 tttttatgca gtatgtcccc ttttattttg gcagaatttt ttctaaatgg tggtttaaca 6720
 ttttcaagca catttcattg tccaatattc atagtaaaga atgagagtta acaataacca 6780
 ttcacattaa aacaagattc ctgctgccag ttgtgaaacc ggttgtctta ggcgtggcag 6840
 ttgatgattg agactgtgat caggaaaatt tccactattt catcaggcct aataggtaga 6900
 ttgtgtctcc aaatgaactg tgttgggttt ccatgcttaa agcacaatag aggtggtgca 6960
 tgaatctcca tgagggttta aatggcagtg atggttcagg cggtagagtt tggagaagaa 7020
 tgggatttgaa acaaaccaaa ggaaagaaaa gtaagtagcc agaaatcaca aaatggcatt 7080
 tttctaàaaa caaaggaaaa ggaataaaag aactaataag tttgaaaccc ctaccctcc 7140
 caaatttggc aggggggggag gtattttttt tctatctatc taactaacc atctagaaaa 7200
 cagttgacca aattatagac ttctaaatgt taatctgctt tctcagttt agttgaaaag 7260
 agactttggt ttgcctactg cagaacttct aggttctttt ttatagtctt ggggttctta 7320
 ttatagatcg aaaatgtgag tcggcataat taagccattc ggagtcttca gaagcagttc 7380
 actcttgaaa tgactccgtc cgcctacagc catttaagat ttcagaacaa aaacagatct 7440
 tgattttctt ttcatgttta actcaagctg ttgctgagtg ggagagtcag aaatgacacc 7500
 agctccactg attactcagc tgctgaagga tgatttttta aaatgcacct ttactgtata 7560
 tggacttcct aatttccacc tgtagagcat cttagggagg ctaacatgtc actctggatg 7620
 ttctttttaga ataagatgca aatctatttt tctgaaggca ttagagatag caaacattta 7680
 ttgtgagttt actatatact aggcactgtg ctaagtgttt tgcataaaaa gtttaaaatt 7740

7800 ctgggcttttt tgttggccca atcataagtt tcatatcagt tcaacattca aattatatta
 7860 aggtacttaa gaagaatccc tggctaaatg tgaggggcag tgccacagat ggactgaaac
 7920 tttatgctta ttgcacattt atgctattat tatttggtga attatagaac caagggagtg
 7980 tggaagccac tggaaaaaat atgagactta gatacataat ttgagtaaaa atggctcaaa
 8040 gtcattgaggg taaagttttt tgtattttcca ttttatttcca gcggcatcgt ttttaaaaaat
 8100 cattatgaat ttgaccctat atagatgttt ccaaataaatt ctttttcacc ttcataaaat
 8160 tccttcctgt ggctgtgaga tgccttgctt atcagttttc aagcttagtt gtctttctca
 8220 tcctttacca ttttagcttt aaaaaacaaa agtgacaatt agaacttcct gcctgctggg
 8280 cctcactgaa agaccgatat tggcctgata aggagatatt tattttgttt tagtggcttc
 8340 agaaatccct ctccctcagc aagctttcca tcacggcccc cccgtcagca tcttccctga
 8400 tagcgttctt ctctgtgttt attctggggc ttcaggctcg cccaggagga actgataacc
 8460 gctggcagga gataacattc tctaaggggc tctcaaattg gaatcgaatc cctcaagcca
 8520 gtcagcctag agaatacatt taaaggggtc agttctggag tttcacagag ttcatttcta
 8580 gacctatcag atagcaagtg tggagttctt tctcaactaa attcaagcag agacattttt
 8640 tagacgatga aggatatttg cacaaaggct tcagcatgat cccccaacc tgctgcctct
 8700 gaaggcatct ccacacattg acagccaatg ccttcagtgc gttcctaggg caggtgtcct
 8760 ggccttgagt actgtcctcc aataatcaga gctcaaaacta aacatcgtat gttttacttt
 8820 ttggtttccag gcaaggctga gcagggaatt ttcagttttc cctgcccaga tgggtgtttt
 8880 ttcctgaagg catcatttat tgtgtagcga ggagacaggg ctggctgtgg cagggatagt
 8940 ttagaactgt cctcattgct gctgttccta aatagtatct ttaccaagta ataacgtgcc
 9000 gtctttggga ataagtgtt tcctcttagc ctgttctgtt ttcttgggtg cgctaagtaa
 9060 ttgaactggc tcaggaagta cctattgtgg tttggcagag gtgactgtca cgccttgtga
 9120 ctccaggggc cagcactgct gggatcctgg ctagaccaga cagagccttg gtgaagtgt
 9180 taggctgtct gcacatcgcg aggaagggtg tattcacttc gctaagctcc ttggcatagg
 9240 cagtttgaac agggctttat caaatcgtta ttcaacaaga gtagaagcga aaattgatga
 9300 ctgtgtatta cttgaaatga gtcttaatct ttcacattta gttctcaggg tatgctgatt
 9360 tccttttaggt aaaccatgaa catcagaaag acttttatta acctatgaca gggccccac
 9420 cccagtattt ttccactcca ttaaaatgga agtttttttt ttttttttct tttttgagac
 9480 agagttttgc tcttgttgcc cagtctggag tgcaatggca caatctcggc tcaccacaac
 9540 ctccacctcc cagattcaag cgattcttct gcctcagcct cccaagtagc tgggattaca
 9600 ggtgtgcgcc accacgcca gctaattttg tatttttagt agagatgggg tttctccatg

ttgggtcaggc	tggtctcgaa	cttccgacct	cagggtgatcc	gcccacctcg	gcctcccaaa	9660
gtgctgggat	tacaggcaag	agccactgca	tccagcttag	gctatcttac	tccagcctaa	9720
acagcaatth	tctatcataa	ggtctgtact	aatgaaaaca	gaatcaccca	aggctgctgt	9780
ttgtttctgtc	tgtgctgcca	ttgtccgcat	tttgctgagg	aggaaacgga	actgcactth	9840
tgagtgagt	gcccagagcc	ttctagaatg	agagtgcgtt	ggaagccaga	tatgtggcga	9900
ttgtgtcgcc	agctgttact	caggthtttct	caagaaggag	gagcaactth	ggcagthttg	9960
cttcagthtct	ctctagccct	ctgtgtaatc	gcccctthttt	ctthatttca	gcacaaacac	10020
agagcagtht	aaagcaaccg	agcactgaga	aaaatgaact	ctgcccacag	aatgtcccaa	10080
agagagagta	cagcgtgaaa	gaaatcctaa	aattggactc	caaccctctc	aaaggaaagg	10140
acctctaccg	ttctaacatt	tcaccctca	catcagaaaa	ggacctcgat	gactthtagaa	10200
gacgtgggag	ccccgaaatg	cccttctacc	ctcgggtcgt	ttaccctatc	cgggcccctc	10260
gcccagaaga	ctthttgaaa	gcttccctgg	cctacgggat	cgagagaccc	acgtacatca	10320
ctcgctcccc	cattccatcc	tccaccactc	caagcccctc	tgcaagaagc	agccccgacc	10380
aaagcctcaa	gagctccagc	cctcacagca	gccctgggaa	tacggtgtcc	cctgtggggc	10440
ccggctctca	agagcaccgg	gactcctacg	cttacttgaa	cgcgtcctac	ggcacggaag	10500
gtttgggctc	ctaccctggc	tacgcacccc	tgccccacct	cccgccagct	ttcatcccct	10560
gtacaacgc	tcactacccc	aagtctctct	tgccccctca	cggcatgaat	tgtaatggcc	10620
tgagcgctgt	gagcagcatg	aatggcatca	acaactttgg	cctcttcccg	aggctgtgcc	10680
gtgtctacag	caatctctct	ggtgggggca	gcctgccccca	ccccatgctc	aacccccactt	10740
ctctcccag	ctcgctgccc	tcagatggag	cccggaggth	gctccagccg	gagcatccca	10800
gggagggtgct	tgtcccggcg	ccccacagt	ccttctcctt	taccggggcc	gccgccagca	10860
tgaaggacaa	ggcctgtagc	cccacaagcg	ggtctcccac	ggcggaaca	gccgccacgg	10920
cagaacatgt	ggtgcagccc	aaagctacct	cagcagcgat	ggcagccccc	agcagcgacg	10980
aagccatgaa	tctcattaaa	aacaaaagaa	acatgaccgg	ctacaagacc	cttccctacc	11040
cgctgaagaa	gcagaacggc	aagatcaagt	acgaatgcaa	cgthtgccg	aagactthtcg	11100
gccagctctc	caatctgaag	gtaggccttg	agagagagca	gtccaagggg	ctgtgagtgc	11160
atgcttggt	ttgtatttag	cttgctttcc	atggggatc	gattgcattt	gcagtagtat	11220
gagcccccg	ttggggatag	tggttatgga	ttccgcctgg	ctthtgccac	ttctagctct	11280
ttgactthtg	acaagtgact	tcccttctcc	tgattthtct	ctgaataata	aaaaaattag	11340
gggtthtgac	tagaagatta	ggtgaaactc	cctgctagcc	tgtgatttht	gtgctthtaa	11400
gaaaaacacc	attctgaaaa	catgaagatt	tcttctthtt	aagactgtct	tgatgcttht	11460

ctttaagatat ttgcatcaac acttgagtct tggagcagaa atgttaggtc tcagagccag 11520
 cttgagagca gagctaacac atgtggcttc ttcccagggtc cacctgagag tgcacagtgg 11580
 agaacggcct ttcaaatgtc agacttgcaa caagggcttt actcagctcg cccacctgca 11640
 gaaacactac ctggtacaca cgggagaaaa gccacatgaa tgccagggtgc gcagtatttt 11700
 ctgggtagac cttctgacct ttgtagaaaa tgtctgtgag tcaccctccc atgtcctata 11760
 tagcccgtag ttaaagccaa caccagattc tgcgttgtcc catcctggac tgatggcact 11820
 atggtccttc ccagtacttt gtatctgctg atgacttgag atggcacagc cagcttccag 11880
 tgggtgggaa aatggtaggg gaaataaaca gccctcgtg tgctgtgtgc ccacatcccc 11940
 ccgtttgctt aataccacac tggagggtgcc acaaggaggc ttctcacctc ctaggttgct 12000
 gggcggttggc cggttaagcct gccctccccg ttggcaactc ttaatcttct ggccttctg 12060
 tctcccttcc ctgctgtctc tctccctac actgtaggtc tgccacaaga gatttagcag 12120
 caccagcaat ctcaagacct acctgcgact ccattctgga gagaaacct accaatgcaa 12180
 ggtgtgccct gccaaagttca ccagtttgt gcacctgaaa ctgcacaagc gtctgcacac 12240
 cggggagcgg cccacaagt gctcccagtg ccacaagaac tacatccatc tctgtagcct 12300
 caaggttcac ctgaaagga actgcgctgc ggccccggcg cctgggctgc ccttgaaga 12360
 ctgacccga atcaatgaag aaatcgagaa gtttgacatc agtgacaatg ctgaccggct 12420
 caggacgtg gaggatgaca tcagtgtgat ctctgtagtg gagaaggaaa ttctggccgt 12480
 ggtcagaaaa gagaaagaag aaactggcct gaaagtgtct ttgcaaagaa acatggggaa 12540
 cgactctc tcctcagggt gcagccttta tgagtcatca gatctacccc tcatgaagtt 12600
 gcctcccagc aaccactac ctctggtacc tgtaaagggtc aaacaagaaa cagttgaacc 12660
 aatggatcct taagattttc agaaaacact tattttgttt ctttaagtat gacttgggtga 12720
 gtcagggtgc ctgtaggaag tggctgtac ataattccag ctctgcaaag ctctctcgac 12780
 agcaaatggt ttcccctcac ctctggaatt aaagaaggaa ctccaaagt actgaaatct 12840
 cagggcatga acaaggcaaa ggccatatat atatatatat atatctgtg atacatatta 12900
 tatatactta ttacacctg tgtctatata ttgcccctg tgtattttga atatttgtgt 12960
 ggacatgttt gcatagcctt cccattacta agactattac ctagtcataa ttattttttc 13020
 aatgataatc cttcataatt tattatacaa ttatcatc agaaagcaat aattaaaaaa 13080
 gtttacaatg actggaaaga ttcttgtaa tttagatata aatgtatttt tgtcttgtgg 13140
 ccattctttg tagataatct ctgcacatct gtataagtac ctaagattta gttaaacaaa 13200
 tatatgactt cagtcaacct ctctctctaa taatggtttg aaaatgaggt ttgggtaatt 13260
 gccaatgttg gacagttgat gtgttcattc ctgggatcct atcatttgaa cagcattgta 13320

Cataacttgg gggtatgtgt gcaggattac ccaagaataa ctttaagtaga agaaacaaga 13380
 aagggaatct tgtatatattt tgttgatagt tcatgttttt cccccagcca caattttacc 13440
 ggaagggtga caggaaggct ttaccaacct gtctctccct ccaaagagc agaatcctcc 13500
 caccgccctg cctcccccac cgagtctgtt ggccattcag agcggccaca tgacttttgc 13560
 atccattgta ttatcagaaa atgtgaagaa gaaaaaatg ccatgtttta aaaccactgc 13620
 gaaaatttcc ccaaagcata ggtggctttg tgtgtgtgcg atttgggggc ttgagtctgg 13680
 gtggtgtttt gttgttggtt tttgttgctt tttttttttt ttttttttta atgtcaaaat 13740
 tgcacaaaaca tgggtgctcta ccaggaagga ttcgaggtag ataggctcag gccacacttt 13800
 aaaaacaaac acacaaacaa caaaaaacgg gtattctagt catcttgggg taaaagcggg 13860
 taatgaacat tcctatcccc aacacatcaa ttgtattttt tctgtaaaac tcagattttc 13920
 ctcaagtattt gtgtttttac attttatggt taatttaatg gaagatgaaa gggcattgca 13980
 aggttgttca acaacagtta cctcattgag tgtgtccagt agtgcaggaa atgatgtctt 14040
 ctctaattgat ttgcttctct agaggagaaa ccgagtaaag gtgctccagc aagatagact 14100
 tgtgttatt ctatctttta ttctgctaag cccaaagatt acatgttggt gttcaaagtg 14160
 agcaaaaaa tgatgtatat ttataaatct atttatacca ctatatcata tgtatatata 14220
 ttataacca cttaaattgt gagccaagcc atgtaaaaga tctacttttt ctaagggcaa 14280
 aaaaaaaaaa aaaaaaaaaa gaacactcct ttctgagact ttgcttaata cttggtgacc 14340
 tcacaatcac gtcggtatga ttgggcaccc ttgcctactg taagagaccc taaaaccttg 14400
 gtgcagtggg ggggaccaca aaacaaccag ggaggaagag atacatcatt ttttagtatt 14460
 agggaccatc taagacagct ctattttttt tttgccactt tatgattatg tggtcacacc 14520
 caagtcacag aaataaaaaa ctgactttac cgctgcaatt tttctgtttt cctccttact 14580
 aaatactgat acattactcc aatctatttt ataattatat ttgacatttt gttcacatca 14640
 actaatgttc acctgtagaa gagaacaaat ttcgaataat ccagggaac ccaagagcct 14700
 tactggtctt ctgtaacttc caagactgac agctttttat gtatcagtgt ttgataaaca 14760
 cagtcttaaa ctgaaggtaa accaaagcat cacgttgaca ttagaccaa tacttttgat 14820
 tcccaactac tcgtttggtt tttttctcct tttgtgcttt cccatagtga gaatttttat 14880
 aaagacttct tgcttctctc accatccatc cttctctttt ctgcctctta catgtgaatg 14940
 ttgagcccac aatcaacagt ggtttttatt tttcctctac tcaaagttaa aactgaccaa 15000

 <210> 66 <211> 46340 <212> DNA <213> Homo sapiens <400> 66
 tattttactt cagtaacaga aaatgaaaga aatgttttaa tgttgctgat tgtattacct 60
 tcaggatcaa tagcagaagg acaaacttct ttgaggagat ctctagtgt gtgcaactgt 120

ccatctgcag	ccacaggacg	aaacagcttc	tgaatgaaag	gtctttcagt	cgttgtctat	180
ttgaaaaagg	aaaaaatgat	tcaagcaatt	aagtctttgt	tgctgccaat	tacaaattta	240
tatatcataa	actttatggt	ggcattaggt	gccttttgat	acggtgtag	cataattaca	300
caacatcaca	gatgtggtat	cactgtgaaa	aatgtttaac	atgataaatt	caggtaaadc	360
taattctgag	gaaacagaca	aatccaaagt	tgggtgggac	attctaaaga	taattggctg	420
ggacccttca	aaaacttaaa	gacattaaaa	agcaaacaac	acaaaaagat	atcaacaaaa	480
gcattttttc	tcagtatctc	ttaaagagac	taacaaagca	aatacaaaac	ataaaccatg	540
gctgaatact	aaattgaaga	aggacatttt	ttagaaatcc	aactatgaaa	cacagttttg	600
ggataaatgg	ggaaatacag	aatggacaac	tgataatatt	attgagttaa	tgtcaaattt	660
cttaggtaca	ataaggacaa	tccttatttt	taagaaattc	attgttcaag	tgtttaggaa	720
agaagtgcc	tgatatccaa	aacttaatat	tctttctctt	tttttgaga	cagagtctcg	780
ctctgccacc	ccggctggag	tgcaagtggc	cgatctcagc	tcactgcaac	ctctactttc	840
cagggttcaag	tgattctcat	ggctcagcct	cccaagtagc	tgggactaca	ggagtgcgcc	900
accatgtcca	gctaactttt	tgtattttta	ctagagatgg	ggtttcacca	tgttgcccag	960
gctgggtctca	aactcctgag	ctcaggcaat	ctgccggctt	cggcctccca	gagtgttagg	1020
gttacaggcg	tgagccaacc	gctcctggcc	ccaaaactta	accatctaata	ggttgagaga	1080
gagacagaga	gagagagaaa	gagagagaca	gagaatgtgt	gtgtgtgtga	agacaaaagca	1140
aaaataaaaa	aatattaact	aatggtgatt	ctaggtagag	ggtgtatgat	tttagtagtt	1200
gcattatttc	aacttttcga	taggtttcac	aatttccaaa	acagcagatc	cagccatttc	1260
atctgacaaa	aactgttagc	agcactacat	cgtaatttat	tgctaataat	ctcattgttt	1320
tactcttaaa	attgtttcat	ttactaaatt	tccttagtga	tgatggaggc	tttatcatga	1380
cagagtacag	aggctctgaa	atgagccagt	gtctatgaag	agcaccactg	tttgcaagat	1440
ctatgatctt	gtaccagtt	tcctttatct	gttaatttgg	gacattccat	atctcttgag	1500
tttggtgtgg	aaataaatga	gcaactttgc	caaccacaga	gtaaataaat	aaatgttaaa	1560
gagaataaaa	gcatttttac	ctcctctctc	cctcttaacg	gttatttcac	tttaagatgg	1620
taaattttta	gctttctgag	atgaaaaatc	attaaaaact	aacaagaaca	gagaaatgcc	1680
atacatatcat	attttttggt	tgcttggttc	ctgagacaag	gtttcactct	gtcaccagc	1740
ttgaattgca	gtggtgcaac	ccccaagtgt	caatcctcca	cctaagcctc	cagagttagct	1800
gggactacag	gtgtgagcca	ccatgctcag	ctaatttttt	tacttttttg	tagaaggggg	1860
tctcactatg	ttgcccaggc	tgctcatat	tttataagaa	tatgacttca	aacacttagg	1920
cattagcgac	aagggtttgt	ttttgtcttt	taatgacaga	ggtatacctc	aacatatttg	1980

ācacaactgt	tagagatttg	gtttaaaaag	aaatagacat	ggatgaagct	ggaaactatc	2040
attctcagca	aactaacaca	ggaacagaaa	accaaacacc	tcatgttctc	actcacaact	2100
gggagctgaa	caacgagaac	acatggacac	aggcagggga	acatcacaca	ccaaggcctg	2160
tcggggagta	gggggctagg	ggagggatag	cattaggaga	aatacctaac	gtagatgagg	2220
ggctgatggg	tgcagcaaac	caccatggca	catgcatatc	tatgtaacaa	acctgcacat	2280
tctgcacatg	tattccagaa	cttaaagtat	aatacaaaat	gaaaaaataa	ataaaaaataa	2340
gtagaaaaaa	taaacatgta	agcatgtgag	ctgcctttcc	taattctatg	tttatgtatt	2400
cactgaatac	atagtatttt	aaaatagtaa	tccaataata	tatttgagtg	tttgtgacaa	2460
gtatgaaaat	tgtaatTTTT	aaaaaatctt	gataatatgc	attgaatatg	atttaattca	2520
cttcactatt	tgaactcttt	agggattatt	tttaaaaaata	tgattgatat	cctttgatat	2580
gttttggtc	tgtgtttcca	tccaaatctc	atctcaaatt	gtaatcccca	ccogtctagg	2640
gagggaactgt	aatccccatg	tgtcgaggga	gggaggtgat	tgggtcatag	gggtggTTTT	2700
cctcatgttg	ttctcgtgat	actgagtga	ttctcatgag	atctgatggt	tttaaaagtg	2760
gcagtttttc	ctgcactctc	atctctcttt	cctgctggct	tgtgaagggtg	cctgcttccc	2820
tttctgccat	gattttaaagt	ttcctgaggc	ccccacaagc	catacggaac	tgtgagtcaa	2880
tttaaaccctt	tgcctttata	aattatccag	tctcagatat	ttctttaaag	cagagtga	2940
acagactaat	acattcttca	atttaaaaaag	ccatactttc	tcatacaagt	tgaaaccaag	3000
aaacaatatca	tgcataatca	agtgattaac	tgtgtaaaga	taataagggt	gaggagtcca	3060
gagaagaaaa	gaaatgaata	gggaactgta	gtgataatTT	aaaatagcca	tcctcactc	3120
gggggtttttg	atcttcaggc	catgaagaag	cttttaaatgc	tttttagcaa	aggaagtaat	3180
gttggtgaaa	ggctttttct	gacgactaat	ggaaagcagt	gctatgtatg	gtgacttggt	3240
tatgaaccaa	aaccagaatg	actggtgaga	ggctgactga	atacagcaag	cttatgtgaa	3300
gacaactgga	gctgggtgcag	tggaaaagga	agacagcagg	actgtaccca	caactcaaag	3360
aaaaaagtca	gaaggtaacct	cccgcagtcc	aacctgaaaa	caacaaagtc	aaaggaatct	3420
tttcaagaat	ttggagctct	cattcatatc	ctaattagt	tatgaaatgt	gagggtggctt	3480
tgctataatg	aaattacctg	gaatattttct	aacacaaaga	aataataaat	gcttgagggtg	3540
gtgaatatcc	tcatttgatc	attacacatt	gcatgcttat	agcaaaagat	tacatgtacc	3600
ccataaataa	ttgcaactat	tatgtatcca	taataattaa	aactaaaaga	ttaaaaatta	3660
cctgaaaaaa	aatgctaaac	aggaaaggcc	aactagtctt	ggttacatat	taaaaaacag	3720
aaattcttct	ctaacctcac	tattggagaa	atatcctggt	atTTTTatat	atctTTTTttt	3780
tcaccctttc	ccaaatctga	gcaagtatta	taaagggtata	accttcaaca	atctTTTTatg	3840

atgaggtatt	tgcttactgg	ggacaaagcc	ccagtgcctat	tacatagtgt	agctaaacgc	3900
tgtagaatgg	taaaaacaag	aaaatgctca	gcaaagtgtt	gtttctcatt	taatgaaaat	3960
cttattttta	aacacaaaaa	ctcaatatac	cccaacccaa	aatctgatga	acattttctg	4020
tttaatat	attatacagt	accttttaaa	acgtaatat	cttattctta	aaaatttagt	4080
gtgctagcaa	atagcaatta	agtacctaag	tcaatcagga	cgacaaaaaa	atactcaatt	4140
tggggagtta	gttacttcta	tcatctgaat	gcgtccctcc	aaaattcatg	ctgaaaccta	4200
ttcctcatca	tggcagtatt	aagaggtgaa	gcctttgaga	ggtaattagg	tcatgagggc	4260
agagtcctca	agaatgggat	caatgctctt	ataaaagagg	ccccagggag	cttgtaaggc	4320
ttttgcccct	tctgccatgt	tgggggggtg	ggggtggggg	cgcagcaacc	agtgcctaact	4380
ctgaagcaga	gagcagccct	caccagaaac	cgaatctgtt	gaagccttga	tctctgactt	4440
cccagcctcc	agaactgtga	gaaataat	tctgttgttt	ataaattacc	cagtctaggc	4500
ggggcggtgt	ggatcacctg	aggtcaggag	ttcaagacca	gcctggccaa	tatggtgaaa	4560
cccatctct	actaaaaata	cagaaaatta	gctgggcata	gttgtgggcg	cctgtaatcc	4620
agctactca	ggaggctgag	gcaggagaat	cacttgaacc	cagaaggcag	aggttgcagt	4680
aatcaagat	catgccattg	aactccagcc	tgggcaacaa	gagggaact	gtctcaaaaa	4740
aaaaaaaaaa	aagtacacac	tctaacatat	tttggtatag	cagcccaa	ggaatggact	4800
agacaatta	cccttaaaat	aaaagctccc	atagagagat	catgcattca	agtacagagg	4860
ttcttaaggg	caatgggaat	ggaggacata	ttcctgcaaa	cttttcaaca	gctctcatta	4920
cccgatgtt	agagctctgc	aaagaagact	aaattatact	gagaaatatt	tttaaattctc	4980
acaaatagg	aatgctgtaa	acgttgattt	agtatatata	aaattagaca	agactaacaa	5040
tatccaatgc	aatctaaatc	ttaggttgac	agacaagaaa	gccactgcaa	acaggaatat	5100
accacaatac	ctgatcttgc	cacatatttg	taaatatgca	aagtatttca	ataacttcca	5160
agaaacagta	ttactctcat	gagaaataac	atgatgtaag	tcacctttga	aactgtcctt	5220
gttacttttt	caaatgtatg	ttagtcattt	cttaacacca	aatgaaatga	aaaactgagg	5280
tggtaatggc	tggctgctcc	catctctcct	ctactcatgt	gccttcacca	atacagcaat	5340
cattttttct	tatatgggaa	atttacagtg	ttgatatagc	tcagagatat	attgaagaaa	5400
agcagaaaaa	cgaaacttat	aaacatttta	ggaaacctta	tgtattttct	taaatagttc	5460
aagtgtaaaa	cttagaattc	ttataaataa	tgtgtgttac	agctatattg	taaatgggtg	5520
ctcatgcctg	taatcccagc	acttcaggag	accgaggtg	gaggagagct	tgagcccatg	5580
agtttgagac	tcacccgggc	aacacagaga	gacctcatct	cttaaaaaaa	aaagaaagaa	5640
agaaagaaat	gaaatgcaaa	gaaaaagtct	ctattttcaaa	tgtagccagt	agagccaata	5700

ggttaaccaa	tattaacatt	aacgttgata	aaacaagaaa	tgatgattta	ctataagctg	5760
aaaatcagac	aatgtatgga	ctttaagagt	aacaggcacg	atcatcacia	acttaaatca	5820
ggtttgagtc	ctatgagtta	tatacagtta	catgatgcaa	caaaagatgc	cagccagttg	5880
ttaaagagta	ttagattcgg	ctgggggtgg	tggctcatgc	ctgtaattcc	agcactttgg	5940
gaggccgagg	aggaggatc	acgaggtcgg	gagtccgaga	ccagcctggc	caatatagtg	6000
aaacctgatc	tctactaaaa	atacaaaaac	tagtcaggca	tgggtggcacg	tgccctgtaat	6060
cccagctact	cgggaggctg	aggcaggaga	attgcttgaa	cccagggggc	ggagggttgca	6120
gtgagccgaa	atcgcgccac	tgcaactctag	cctgggcaac	agagcaagac	tctgtctcaa	6180
aaaagagtat	tagattcaag	tcctgtttct	gtcattttatt	atggaaccat	ggacacaact	6240
acctatcttt	cctgaacctc	agttttttca	actgcaaaac	aggaatatat	acatatgtgt	6300
atatatacat	ctgtgtaaac	acatatgtgt	atatatacat	ctgtgtaaac	acatatgtat	6360
atgtataaat	ggagataata	cctacattat	agtttctgag	ataataaaat	gcacaacaca	6420
attctgacac	ataacaattt	gtaacttaaa	acataccatc	accagggcca	ctagttttag	6480
acactgtaa	tgcatagtct	aatttaatac	tatgcaaact	gtgttcactc	aaggttttat	6540
ctccttttaa	tttcattcat	ttactcttca	gttgtttgta	agctaaaaag	tccagaatca	6600
gaaattcag	aagtttacgt	tttaatgttt	ttctatatgg	caaggaaaaa	aaaaagggca	6660
agtcatttt	aacactactt	tcaaaatcag	cctagaactt	aacactaaag	gcatgaccca	6720
taaaagggaa	tactaataaa	tagacttaat	taaaattaaa	caacaacaac	aacagctaag	6780
gttttggtct	gcaaaagatc	ctgtgaagag	aatgaaaaca	taagccgcag	gctgggagaa	6840
patatttgca	aaccatattt	ccgagaaagg	tcttggtgtct	ataatatata	agaactccca	6900
aaattcaaca	gtttttaaaa	aaagcaaata	atccaattag	aaaatgggca	aaagacatga	6960
acagacattt	taccaaaagag	aatatatagg	tggcaaataa	gcatatgaaa	acatatctca	7020
cacatcatta	gccattaaag	aaatgcaaata	taaaaccaca	atgtgatatc	attacacacc	7080
taccaaata	tccaaaataa	aaattagtgg	taacaccaaa	tgctggtgcg	catgtggaaa	7140
aatagtcctt	cacacactga	tggtacaaat	gcaaaacagt	acagtccctc	aggaaaggag	7200
tatggcagtt	tcttacaaaa	ctaaacatgc	acttaccata	tgaccaagta	attatactct	7260
tgaatattcc	cagaagtaaa	aatgtcttct	ccaaaaaact	tatacatgaa	cgttcatagc	7320
tgtttttatc	gtgagagtca	aaaacagaaa	gcaatcccag	ggctacccat	taaaacaggt	7380
gaatgcttat	aaactgactg	taataggtct	gtcccacgga	atactactca	gcaataaaaa	7440
ggaacaaact	actggtatat	gcaacaactt	ggatagatct	caaggaggtt	atgttatgtg	7500
aaaaaagtca	atctcaaaaag	gttacacact	gcatgactcc	actgatataa	cattagtga	7560

atgacaaaaa	ttttagaaat	ggaaaacaaa	ttagtagttg	tcagaggtta	gggaagaaat	7620
gcagtaaggt	aggtggctgt	ggctataaaa	gggtagccta	agagatcctt	ctgttgaaac	7680
gggtatat	ttt tgaatatagg	gtgaatttac	atatgtgata	aagattgcat	agaactaaat	7740
acacacacac	agtatatgta	aaactaagga	aatctgagta	aggtttgtgg	attatattaa	7800
tacaatttcc	tggttgtgat	actgtactgt	aattatgcaa	gatgttagaa	ttgggggaaa	7860
ctagatgaag	ggtatgtaga	tctttctgta	ttatttctta	caattgcatg	tgaatctgta	7920
attatctcaa	aataaaaatt	tttttcaaaa	tttcaaaaca	actagtctag	agctttgtta	7980
atcaaagttt	tctctgagga	cctgtagcat	tttggttatt	acctggatct	tattaaaatg	8040
tagattctca	ggctgcatat	tgggaattcct	gaattggaat	ccgcatttta	acaagatttc	8100
caagtgattc	atgttttaaag	tttgagaagc	actagtctac	aacaatgact	tttaaccttt	8160
caacctactc	taacacactt	gaaggccata	acaaaattca	catcaataac	agttgctcgg	8220
gggacagtg	actctcaaca	caaatgagtg	aggaaagggtg	gggactcaag	actcaggtag	8280
gggaaaagc	cccttaggtg	atcctgatga	aatgttttct	ccatcctggc	tgaaaaaccc	8340
ggaacagtca	attaaggctc	aaaacaaaag	taatgtttat	aatactggag	atctttaaaa	8400
ggcagataat	atatactata	acagagcaaa	ggtaattatt	acaatgtata	aatcttataa	8460
gaacccaaaat	cagaattaaa	atcactaagc	acataatgaa	aatcctttta	aaagtataaa	8520
atgaatgta	gtctaagtaa	atactaataa	tggcagttat	agtgagaaaa	gctctagagt	8580
ctttttactct	tcatacttcc	tagtcacaaa	catctatttc	caaaactgac	ccttcgtatt	8640
caaaataatt	tatggcctgg	tacagtaata	agagcatgat	atttaaagcc	agtcagaaga	8700
acatattct	agctctggat	ggcacttgat	gacgatggat	tcagcttatg	gttccaatcc	8760
cagctctgtc	aattagtacc	tatatgaccc	tagtcaaata	cttaaacctt	cttgtgttac	8820
ttgtgtgtca	attgtatcat	ctataaaatg	aggatatata	cagtatatac	ctcatagatt	8880
tttttgtgaa	ggttatacaa	ttaattcata	taaagtattt	agaacaatgt	ctagcacagt	8940
gaattctcaa	tgagtgttat	aattgttctt	tttaaagtgtg	acttgactct	caacagaact	9000
ctactgaatt	ctaataatgta	ttctgtattg	agctgtcaaa	aaaaataagg	attataataa	9060
catatactat	tcttgtagtc	aaccctgtta	ctatgttatt	actagtgtca	gttttgttgt	9120
tttggtcata	catattgttt	tacatacatt	aagaattatt	agaaatgttg	gtttattaaa	9180
aatgaccatt	tatggctaga	agggtatata	tctggctcac	tgactgtgga	gtcaatgtcc	9240
ataaagagga	ggaagaatgc	catcagagta	aaaggagatt	ctattcactg	aaacaaagtg	9300
ataaaaagct	atgaaagaga	aaaacataaa	ataaccaaaag	gggtgaaact	taacagatgc	9360
ccagtagatg	cacaatgcac	tgggttgtaa	aacttaaaat	ggccttaatt	aaaagccaag	9420

ccacggatgga	ggtgctgggg	gagtcctcta	cggacacagc	aggcagaatg	taacaatgac	9480
aaggggctca	agtttattta	aaaagagatt	ggacaggccg	ggcgtggtgg	ctcacgcctg	9540
taatcccagc	actttgggag	gctgaggcgg	gtggatcatg	aggtcgggag	ttcgaggcca	9600
gcctggccaa	catggcgaaa	cctcatctct	actaaaaata	aaaaaaatta	gccgggagtg	9660
gtggcgtgca	tctgtagtcc	cagctactca	ggaggctgag	gcaggagaat	cacttgaacc	9720
tgggaggcaa	aggttgcagt	gagctgagat	catgtcactg	cactccagcc	tgggcaacag	9780
agtgagactg	ctcaggatct	cccaaagacc	caaatccctg	taaactgaat	gcataatatc	9840
atttgctcca	gtgaggctta	gatggacatt	ctagtcttct	tggttgagct	gaagaaacaa	9900
atattatatt	gataatttat	gtatgttgta	tttttcaagg	tatagcaaca	agtttttatt	9960
catcagctac	tttgtgtgtg	tgctttgttt	ttaagtcttt	tgaaacagga	tggtgattta	10020
ctacatttat	aagtaaaatt	tatttgattt	acaaggggtg	cttaagtgtg	tcacaggatt	10080
tcacttggtta	tatttgcagg	tgcttaaaaa	atcagctata	ctaaactata	actggaatta	10140
gcaaaagttca	tttattgatt	aatcaagaat	ataattagat	ttgcctaact	atataagtag	10200
gactatgtgt	tatttaagaa	ttaaattctag	aaaagggatg	gactctggaa	atatcaagaa	10260
gtgaaaaaga	ctgctctcat	ttttgtacaa	caattactaa	atttctaagt	agcattaatt	10320
gaactgaaaa	ggcatttttag	aaaaactaga	ttttacaatt	tataactcta	ataaaaacaca	10380
gctaactatg	agtgtgcttg	ttcatgceca	aaagctacct	tccaaaatta	aaaaccctat	10440
ttgggatggctg	ggtgcagagg	ctcatgcctg	taattccagc	actttgggag	gccaaaggcgg	10500
ggggatcacc	tgaggtcagg	agttcgagat	cagcctggcc	aatatggtga	acccgtctct	10560
aaacaaaaata	caaaaattag	ccgggcgctg	tggcgggtgc	ttgtaatccc	agctactcgg	10620
gaggctgagg	caggagaatc	acttgatcct	gtgaggcgga	ggttgacagt	agctgacacc	10680
gtcccactgc	actccagcct	gggcgagagc	ccagagcgag	actccgtata	ttaaacaaaa	10740
caaaacaaaa	ctcaaaaaac	cctattggca	attactaggg	ccatcaaata	agtatatatt	10800
cacttgacac	acaattttga	gataatgaac	cgaacttact	atttttgaaa	atattacata	10860
ataaatatta	gtgaagcttc	attgctgaaa	tgggtgacaaa	gatgaatagc	aataaaaactt	10920
ttcttataga	tcttttagcaa	aaacaaaaaa	accccaagca	tactatggta	cattacttta	10980
gagaatcaag	tagctgctag	ttgagtaata	gtggtaatag	gcactacaat	gatataaaca	11040
aattacaaca	agaatatatt	tttttatttc	ctgtccatgt	tttaaaaaag	ctttgggtttt	11100
acctatgttt	aacaaaagca	taggtacaac	aacgactact	actactaaca	tataagtagc	11160
ctggatagaa	ttatcttaat	agtagtacct	aagtgcagga	tctctaagta	atgatcagaa	11220
ggcaggaata	aattttatca	gaaatcttca	ttcattacat	atttactatg	cattttaccag	11280

ggtatcacta	tgctaattgga	tacaaagata	aataacatgc	aaacaactgt	aatacagtgt	11340
tatgtgataa	cagaaatatg	tacaaagcac	tatgaaaaaa	attacaaagc	ttgagcacia	11400
attttaactc	tggacttact	ggcattttaga	gcaaaaccaa	aacaatccta	actggttaat	11460
ttcattttct	aagagttgga	agctatatca	gtaggtacaa	agtaaaatat	gctaattgtg	11520
gtagaaagta	aaatattaca	acagtagaga	atttcaaaag	aagataaaaa	taatggaggg	11580
aatatagaag	gtcttcaagc	ttccagcttg	aaatacatat	ttttttttaa	atagagaaaag	11640
agataaagtc	atttgagtat	tcagagggca	gactgaatat	aatgggtactt	ctgagaaatc	11700
agtggataag	gagagaaaag	tggactaaag	gccatagcat	atagagcttg	gaatgtcaaa	11760
tgtagtggaa	ataacaaagg	tttggttgga	atcccaactc	ccaacaacgt	actgtgtatc	11820
tagagcaa	tacatcaacc	tttgggagta	ctgtttctga	atctgaaaaa	tgaggaaaac	11880
ttatctttga	acaattgatg	tgataattaa	atgagatata	tgaaatatct	aatgtaacaa	11940
gtgcttaaca	atgactagtt	cttttcattc	ctctcttgaa	ccattgtgaa	acgtagaacc	12000
agaaaaggta	acagtattta	gttggttacag	aaccatttaa	gagagaataa	aaaataactg	12060
gtattctaac	ttcagtttcc	tttgaagtct	tgttaatgag	aataaatatt	atgtggcaca	12120
agaaaaaga	aaacaggggt	ttacacagga	tatgctgcca	gactttacca	acaatgacac	12180
atgatatctg	cttcaactgt	cccattgcata	tttggcttaa	gatataattca	tgcatatcaa	12240
attttacatc	acatggtttt	caaaagaaga	ttcattaaaa	ttagcttaag	aatgtacaca	12300
atataacaata	cctcattaaa	taaaaagaac	agaccatttc	caaataaatg	cttttagagc	12360
ttacagtaa	acagtctttt	ggtggtagaa	agagggggaa	cagagagggg	agtgggtggg	12420
agtctgtagc	acttatcaga	ctacttttat	cctttatgta	gagaaatagg	agagttgaaa	12480
ataagcactt	tctgtactta	tggtgagagt	ctgaagccca	cttttaatat	tcttgacaac	12540
actaaaaaat	aataattaac	atttgaaaag	ctgtcattat	tatagtcagg	gacacttaat	12600
ctccaaagga	gaagtttctt	aattgatact	atgattaaat	aaaagcatcc	atcagaatta	12660
tatccacaat	ctggtttgga	gtttatgttt	tgtcttattt	aaattgttat	acttattata	12720
attctgtcta	gacagtgcc	aatgtacttt	gtcatacaaa	cacttgaggc	aaattttctt	12780
caaataagcg	caacactttg	tttctcttct	gtatcctttg	actgaataac	gtgtggtaca	12840
gagaagtaat	acttcccttt	cttgggatcg	agatcaattt	gatgcttggt	ataagcccat	12900
ttacagaaca	aatggatttg	cttttaaatt	tttatatgaa	cttatcagta	gactagccaa	12960
aaaagaagct	tcatataaaa	gtgctaggat	tgatattctt	agtaataatt	aggtaaattc	13020
tctaaaattt	tctcccaaaa	gatctgaaaa	atcataccaa	gggaagtata	gtttaaattt	13080
cattatatat	aatagcttta	aaatatcttt	gctaattcta	cccaaagcca	cactaaaaag	13140

actaatacaa	aaagaatgta	attaataaac	tatttttcctc	tgaagaatca	aagggcactt	13200
ctgcatatga	acatgtttta	tccttttggt	gtacttacat	aaaataatta	agaaacactt	13260
ttaattagta	taaacaaaga	aatcaaaata	gcaagaagaa	atgtctgagt	aaaagcagct	13320
gtgctgacct	caaaagtga	attctgttct	cttgatgccc	agttaagtgt	ctaaccacag	13380
gaaaagtgat	tctaaacctg	ggctaggagc	tagtgagct	cttcaaacag	tctcacctac	13440
cctcaccct	caaggaatgg	tctatgggtt	ctgtggtgaa	cgctaaagtt	tataacatgg	13500
gaatatttat	tattttgttt	ctaacacaaa	taatttttaa	aaatttattc	tactaaagta	13560
acatcaaagg	gaaatttcat	aaaaattctt	ttgaaatttt	tagaagtagc	aaataaaggc	13620
aagtgataaa	tattttacag	atttcaccac	ttacgtaatc	tgatcaacaa	attttaaaaa	13680
catagcactt	gaatactatt	aaaaatatat	taaaaaggta	acatagtaaa	actataaaat	13740
tctttaaaaa	aaatataaga	ggaaaccttc	gtgaccttgg	attaggaaat	ggtttcttac	13800
atcaggcaac	ctaaaaatac	aagcaaccaa	agaaaaaac	agacaaactg	gacttcatca	13860
aggttaaaaa	cttttgttct	tcaaatgaca	tcatcaagaa	aataaatccc	acagaatggg	13920
gaaaaatatt	tgcaaaccat	atctgataag	agaccactat	tcagaatatg	taaagaattt	13980
gtaaaaactta	taaataaaaa	gttaaagaag	tcaattttta	aatgagcaaa	ggatctgaag	14040
taatttctcc	taagaaatac	gaatggctag	ttaaatgcat	gaaaagatgt	ttagcatcac	14100
ggtcatttag	gaaagagcaa	aaacaaaaat	gatatactcc	ttcatacca	ctaagactgc	14160
tgtaattaaa	actatagaaa	ataagcgttg	gcaaggatgt	ggacaaattg	gaaccctcct	14220
atacactga	tggtagaaat	gtaaaatggt	gcagatgctt	tggaaaacag	tctgacaata	14280
cccaaagggt	ttaaactgtg	aattaccatg	caaccacagc	attctactcc	taagtatcta	14340
cccaagagaa	atgaaaatat	atgttcacca	aaacatttgt	acataaatat	taactgcagc	14400
ttttattcat	aatagccaaa	aagtggagac	aatccacatg	tctatcaatt	ggtgaattga	14460
taaacaaaat	gtggtatctt	catacaacta	ttactgggcc	ataaaaagaa	tgatgtattg	14520
atacatgcta	caaaatgaat	gaaccttaaa	aacaatatgc	aagcaaaaga	aaccagacac	14580
aaaaggccat	atattacatg	atgctaatta	cataaaatgt	ccagaaggga	gaaataaatt	14640
agtagttgcc	aagggctgga	gggaggggga	atgatataag	tgactgcaa	tgggcatggg	14700
gtttcttttt	agggtgatga	aaatgttctg	aaattttatc	acgggaatgg	ttgcacaact	14760
ctgtgtaact	tagaattcag	tgactcctaa	aaccaatgaa	tagcatgctt	taaaagggtga	14820
cctttgctga	gcatagtggc	tatagtecta	gctacttggg	aagctgaggc	aagaggatca	14880
cttgagccag	gagttccagg	ctgtactgca	ctatgatcat	acctgtaaat	agccaccata	14940
cacaccagcc	tgggcaacac	agaccatgtc	tctaaataaa	taaacaaata	aataaataaa	15000

agggtgacct	ctgtagtatt	gagattatac	ttcaagtaag	ctgttattaa	aaaaaaaaa	15060
gttatcatat	gggtggcagg	ggaaatcatt	ctgggatgat	ggctaacttc	atcagtat	15120
gatttatacc	tatgcatcat	accttatggt	tgttttatgc	attttgtggg	ttttttaaaa	15180
aaattatatt	tcataaaaac	aaattttaaa	aaaattaaag	tcaagaaccc	caaaacaaca	15240
aagatcagag	atacatttct	accttatcaa	ttcagaaaaa	ttacaagttt	ttttcttaaa	15300
aattgtatag	catcatgggtg	attttaaggt	acctgtagga	atttaaataa	ctttgtctta	15360
actgttcacc	aaaactcatt	taatattcat	gttctgatac	tgaaaatgaa	gctgaaaagt	15420
tttgaaatta	caatatgcta	gtttaaaaag	gtttactaaa	atacataatt	tcattataag	15480
gagtaatatg	aaataaaaagt	atcaaatatg	ggaccattaa	aatgtcctt	actaacaagt	15540
tgctaccac	attgtggact	cactgcgtcc	actgtttgcg	agcttttcca	gaacgctcgc	15600
caccagttag	ggtagccaag	aactcctcat	cttcactttc	ttcctcacta	gcttggaacc	15660
ctgggattcc	caccacact	gctgtgacct	gaatggggaa	gagaaacgcc	atagtaaggg	15720
actcttcct	tttatagatt	tctgaattag	aatctggcat	tacaaaagaa	caatgttata	15780
atccagggtc	agagtttata	gttctatttc	actattactt	atatggcttg	tcctaggaac	15840
taactatta	tttacaatgt	aagtacctat	ttccacaaaa	aaattcaaaa	ttttggaata	15900
aatatctga	agagagaatg	gtctattgaa	tccaaagtag	gctgatacat	cccaacagta	15960
ttcagattg	agataataat	aataccacca	attcatcaag	tcaaattata	tgcttatttt	16020
ccacaatgga	agtttttaaaa	tagtataaac	attttaatat	atagcaggct	taacttatga	16080
taataaaca	gggttctaag	aaaatagtat	acatcaaata	ttaatgtgct	tcttgataaa	16140
tttaggtgac	aatttatcca	tctgagaaat	gcaaaagaga	ctttggtaag	gggttgagta	16200
aggagcattc	tgtgtcaaag	aattcactag	caaaagaggg	tatactgtag	ttacaagcta	16260
taatcactgt	acttatttta	aatccctctt	cagaaccagg	tcttaaaaga	tgataaacat	16320
ggcctcatga	ataactatca	accaaactat	agaaaagagt	gcaagagtgt	ggtgttctaa	16380
cttaaaatat	ggtgttttat	tcaaataatt	ttatttaagg	ctccaaaagc	agcagcctca	16440
ttccccagaa	atcatagtta	aatgaaatct	tccttactaa	aggaaaaatg	aatcacaata	16500
tttaacgtga	acatttttaa	aacactctaa	agcaacaaaa	ctattcaatt	gtatgtgata	16560
tggcttagaa	aggcatgtag	gtaaaaagga	ctaaaaactc	taataatggt	tgggcaaaaa	16620
gtaaatttgt	tagttctact	ccattaagca	ttcctcaagc	agtgtaaaaa	tcagagttca	16680
agttacactt	tgatgtgtag	atcctttgaa	agccactcta	ccctgtttta	tatgaagcat	16740
ccgcagctaa	aatgaacacc	tagtgaagag	tatgaatgct	gcaatacata	agcagacgtc	16800
agaattgtcc	caagctgatt	ctaagttact	ttaaacatgt	atgcagagtc	agaatatgac	16860

ttactttctta	gaagtaacag	ataattacct	ttggcataat	gaaaaaaact	ttaaatgtaa	16920
gttaatacag	gtattttccc	tttagcaaag	ctttgctttt	aaaagaaaac	ttcaaaactt	16980
aaattaaaaat	aggaaatgct	ctactatgta	gtaaaaatac	tttttagatt	actgaagcaa	17040
agaaaaggaa	ggattctatg	agggaggaaa	agtgggagaa	aatgttaaag	aaaaaaagga	17100
agaaggaaaag	aaaagagaaa	aggaggaaaag	aacacaagga	cagaaaggcc	tattgaaata	17160
tattattttct	ttcaaatttt	aaacgagcag	aataaattct	tttgttttat	aactatgaaa	17220
taatctatgt	tcctcttatc	tatgcttgga	aaatttagac	aaaatgttaa	gagtaagtac	17280
tacattggat	ttccgggtct	tcagctctga	aaacaagctg	tttcttaaca	tacgtcaatt	17340
ttctatatatt	catgtcattt	ctatttgcaa	atgttataaa	gttcaatatg	atgtaaaaca	17400
tggttaaagt	aagttcaaaa	ataagtataa	catacattag	tttggtatt	ccaaatttca	17460
tgcacattaa	ctcagccaca	catctaacac	agtcagccct	ccctatccag	gggttctgca	17520
ctgtgcagatt	caactaacca	tgggtcgaaa	atgtttttgt	accaaactg	tacaggcttt	17580
cttcttggt	atcattccct	aactacagta	taacaactat	tttcacagt	tgtacatgtg	17640
ctgaaatat	tataagtaat	ctacagataa	tttaaagtat	acaagaggg	atgcataggt	17700
cttatgcaaa	tactacacca	ttttatatca	gactctcaaa	catcagtaga	atttggtaac	17760
ctagggaggt	cctggaacta	atcaccacga	ggtatcgaca	gatggctata	tataaatcac	17820
ctagtgaatt	caggattcac	attatttcac	aactagtata	attttatggt	gttcacataa	17880
cttgtgtcaca	acatacat	gcagacaggt	gactttcatg	aaaagattac	acccaagata	17940
ctacatatggt	ctactcaa	acgggtttcca	aatgtgtatc	caatcttggt	taattataat	18000
ctaaactcacc	attccattga	taagcgacct	ctaccaacct	gcttatcccc	tccaagcaat	18060
ataacagtgg	ttctctgaac	caatattgac	cctcctttaa	attgatagcc	tttttttaaa	18120
aagctaacca	ttgagaagta	catactgttg	aagacagaac	atattctgta	aaatgctccc	18180
aagatatcaa	agtcagatga	tacaactgaa	tgtttatgct	agattatatt	tctaagctga	18240
gaattacatt	ttaatatacc	ataagcaatc	tgcaaaagaa	gcaacttgcc	taaagatttc	18300
aggagtttca	agtatgcata	tgtcaatatc	tgtatcaata	tgtaatatca	atataatcaa	18360
tgcacacaac	aatacgtaac	tgtacttata	tcactctcct	agcactaatt	attacaaaca	18420
atctgcatgc	actgcaaagc	aaaagtataa	tataaaatcc	caaaaaacct	tgaaaattta	18480
ataaaaccaa	aaaacaggca	tcacacacaa	gaactgaggc	gtataacttca	ttaatgagta	18540
tgatatcctg	atatgaaatg	tcaaacaaaa	ttaccaggc	tcagggttaga	aataaagata	18600
ggacattagt	ctttgtattt	ttaaattgat	tttttcttct	aatattcctt	aatgataacc	18660
ctatatatta	cctacttaaa	attattagca	aatagttatt	ttaaagtat	gagtaattag	18720

acaaaaagca	actctcatat	ttacccaaaa	gaaggaacca	ctaccaagaa	tcaaagccta	18780
gtaattctgt	tcttaacaga	caggtggtgt	gtattctggc	atgttacatg	aaaatcactt	18840
atgagaagaa	cagaaaaaaa	aattagaagg	tagttttcac	tatggaaata	ggtaagtgat	18900
taagcagatt	ttcttacacc	atgaaattgt	cagcagactc	aataatcacc	ctaaggggca	18960
tcattctgga	tgccgacatt	ctctatgatg	gaaagggact	gaaagtaaaa	tgcactaatg	19020
acataaagaa	accaatatcc	aatagtaaag	ttgaagaaat	aaacattctt	tggacaggaa	19080
ctaagctgaa	gtttgcaact	accaagaatg	tattatgcca	gcagtaaatt	aggaaactaa	19140
agcccatgtc	aaccaatgaa	aaatgggagg	actgaaatca	atcattaaag	cagcagcaag	19200
gttctaacta	ttctaaggta	taggctacct	ctggcgtata	ttatcagagt	tgacaattct	19260
tccaagaaat	tctaacatca	actgtaatct	gaggtccttt	aaaaaataat	ataaaccagg	19320
cagtagactt	acattttgta	atattttctt	ctaagagctg	tacattaaga	ttttatttgt	19380
gaataaaata	ctatcaaata	attagctata	gaacagctct	attttcaaca	gttataacat	19440
tttaagccat	ctcacattta	acctaaactt	ttatcaaatg	tcaaaactga	ggccgggtac	19500
ggtggctaac	acctgtagtc	ccagcacttt	gggaggccaa	gatgggcgga	tcacttgagc	19560
ccaggaattc	gagaccaacc	tgggcaacat	ggtgaaaccc	catctctata	aaaaatacaa	19620
atttagctg	cgcttggtgg	tgtgcgcctg	tagtcccagc	tactagagag	gctgagggag	19680
gagaatcacc	agggcctggg	agatcaaagc	tgcagtgagc	tgagatcgtg	ccactgcact	19740
ccaccctggg	tgacagagtg	agaccctgtc	tcaaaaaaaaa	aaaaaaaaaag	aaagaaagaa	19800
aaaaaatca	aaactgatca	cttgagggtcc	aacttatgtt	tactatatct	acttatattc	19860
caaaagacat	cttaaggaga	gatgaaatca	taaaaagggtg	aggatgagaa	agaaaatagt	19920
aagtcagtaa	ggtcaatttt	tacatatatt	aggctagcat	aataaaaata	tgagtgtctt	19980
attattattt	ttttttgaga	cagagtcttg	ctctgttgcc	caggctggag	tgcagtgggtg	20040
caatcatggc	ttactgcaat	gtctgccttc	caggttcaag	caatccttgt	gcctcagcct	20100
cctgagtagc	tgggattaca	ggtgtgcgtc	accctgcca	gctaattttt	gtattttcag	20160
tagagacagg	gtttcaccac	gttaaaccat	gagtttgccc	aggatggtct	caaactccca	20220
aagtgctagg	attacatgcg	tgagccactg	cgtctggcct	aaagtgtctt	attataacca	20280
agaatttatt	tgtggagaga	ggtaaagaaa	actcattttt	agtgaaataa	ttaaaactgc	20340
atcattcaca	atctatcttt	caaaatgagg	tattaaactat	tttggcttct	aaaattaccc	20400
catatactac	atgcatgagc	atgggaattg	aagttatttt	attcctaagt	ttgagacttc	20460
atgttttaat	gtgatcacta	aaaatttcct	aattgatgat	taggaaaata	actttctgta	20520
aaattccaga	atttttagctg	tttcaatctc	ttcatattaa	ggggagaaca	ttatgttttt	20580

actttctgtg	catgcacttt	ctttattaga	agaaaatgga	ctgagggcag	taagcaaccg	20640
aaaaggaaga	gtaataagaa	gcctgatgtg	tgtgaaaact	ggagaacagt	ctcaaactcat	20700
aaaaagttat	gacagaagag	gcataaaaaa	taaaagtaat	gaacttaata	tatgaaaggt	20760
aataatgatt	aagagcatag	gctataaagc	cagactggac	tccctggatt	caaatcctgg	20820
ctcttcta	tactaggtag	gtaaccctga	gcaagtttca	atgaccaatc	tttttctcaa	20880
ttacctcagg	tatataaagg	ggacagtaac	agcattttaac	ccagaggaca	ataaggatta	20940
aataaataca	tgtaaaataa	tttaaaacag	tacctgggtat	tcaataaagc	gcaataaatg	21000
ttagctgcta	ttattattca	tctaaacttt	actttcatta	ccagcaatat	tttttaatat	21060
taaaaatatt	gaataaaaca	atgacctagc	ttagttaaata	aattcataat	gagaaaatgt	21120
tgatttcatt	taataataac	tttagtagtt	tgggataaca	ctttgcatat	tttaatttcc	21180
ccagctataa	ataactcaaa	taatttgcca	tcagatgatc	tgttattttg	aagttaacaa	21240
aaagcatt	tcctaaaaaa	gttctaatac	ataacttttg	ctctcatctt	atgtttttaa	21300
caaaaatgg	caaactcatc	gcatcaaata	gttcctactc	ttataacatg	acaattgttt	21360
aaaatatat	ctgctggaaa	aagcaactga	agtcctagaa	aatagaaatg	taatttttaa	21420
taattccaat	aaagctggag	gaggaagggg	aaaaacatat	ctgccaaata	agcttataat	21480
taatagttgt	tttcagtttt	caaaaatcca	cataggaagc	aatttaagcc	taaattgcct	21540
agctctcaat	ctcagcgtag	tagatagctt	agggcaatca	aaacttgctg	tgttgggctg	21600
cccctacag	gactcaattt	acctatttct	tttaaaaggt	gtgtaagtag	gaaatatgat	21660
aaagtttta	cattaacaat	attaatgcta	aagcagatga	ttatcattca	cgcatttact	21720
taggaggaa	acagtctctg	agaacatct	atagagatac	agagagaaat	gaaacaatcc	21780
ttgtccttga	ggaattaata	gtttactgct	tacagagaaa	ctacatacat	ggtgaaatat	21840
ttaaaaatag	ctcatgatat	cctctatgat	attatgtttg	ctatagaaaa	agaacaaggc	21900
tgaagatcta	agatccaagt	tctactgttg	gctctgccat	caaacaataa	gctaaacaat	21960
gtacaagtca	gttttgggga	agctgtctta	ttcccaaaat	gaggaggtta	aattagttaa	22020
ttcttccagc	ctctatggct	ctaataattc	acagttacat	ttgtcaaaac	aaaaggtaga	22080
aggaaatggt	tcaaaaacag	acttcgcaga	aagaacatct	atatgatatg	aagggtctgg	22140
gcatatgtga	agaaatcaag	gaagacttct	tgaggaaggt	gacatctgaa	gtaactttag	22200
aagcactctg	ggagccaagg	ctattcccag	gagtttaacag	agtcagataa	taaaagatca	22260
aagatgttta	ggggaatagc	atgcagtgtt	atttggttgc	agtctagcta	tatttttagga	22320
aacatcaa	taatatcagt	ataaaaactca	acagaatgga	gggagaaaaa	gcaggtagaa	22380
aatctaaga	accactaaaa	tagttcatct	agaagataaa	ggacctatga	gctaaatcag	22440

tgcaaatggc	aagaagggaa	taaatgaaga	cagttctggt	ccattagaac	tgcaactcaa	22500
caaaagtgat	caaaagagtt	attccaaagt	attgacctgg	taacttgaag	aaaagtaaag	22560
aaagaggaaa	ctggacactg	aaacagaaga	agtagattat	gtatttggtg	gtgaatggaa	22620
gtagattggt	gggaccagtt	agaacctcac	agagaagaac	tatgttaaga	ccagaaatac	22680
ggccaggtgc	ggtggctcat	gcctgtaatc	ccagcacttt	gggaggcctg	ggtgggcgga	22740
tcacctgagg	tcaggagttc	aagaccagcc	tgacaaaagat	ggagaaaccc	tgtctcccct	22800
gtctgtacta	atacaaaatt	agccaggtgt	ggtggtgcat	gcctgtaatc	ccagctactc	22860
aggaggctga	ggtaggagaa	tcgcttgaac	ccgggaggcg	gaggttgcag	tgagctgaga	22920
tcgcaccatt	gcactccagg	ctgggcaaaa	agagcgaaac	tcttgtctca	aaaaacaaac	22980
aaacaaaaca	aaacaaaaca	cagaaataca	tcaattaaaa	aagtgagcta	ttcaccagat	23040
atgttccact	ggtcataaaa	caaaagaata	caggaggcat	gacaagccat	catcattgct	23100
gtataaaata	ctcacagcaa	aattataatg	atttaagtca	ataacatcta	ataattccag	23160
ctatagtgtg	caatttaatt	tattatgtgc	caggcacaa	agtttattaa	aggtattacc	23220
ctataatttt	acaataaccc	tattttacag	attataaaat	ggaggcccag	agatgtaagg	23280
ctgaacgagcc	aaatcaccta	gttacctgga	atataaaact	agaactgcct	aaatcaaaag	23340
ctctcaatct	taaccacatg	ctatactgat	gcatgtcaaa	gattcaattc	attcagattt	23400
ctcaagggtta	tcggaaaacc	tatgtagata	aaaatttcca	aaataatcaa	ggatatgtaa	23460
ctttttacaga	aagcaatcac	tgatcatcta	ttgcaatact	catgttctta	agcaatatac	23520
ctgagttgaaa	tttttatatt	ttataaataa	ttagaaagaa	tacatttttt	aaaactttta	23580
ctaaacacctc	agtttttatt	ctcttcccca	aatttcaaca	aatccatttt	atccaaactt	23640
gaggttgaat	cattaaagtg	gtgatatcat	cagtaatagc	agagtgagga	ccctgaatat	23700
actctcctcc	ataaaagcaa	caagaacaca	aaaattctca	aatgaacttt	tttctgaaat	23760
ctttcaaaaag	ccccactctc	agaaaactgt	cattatttga	tctgccagtt	ccctagaaaa	23820
acctccctca	taggacatta	tttgacttga	ctcagagctc	actcagtgca	aacaatttta	23880
tcaccaggag	agtttgtgga	aaatcagtgg	caattgttaa	acatcacatc	tgccatgaga	23940
tagcaataac	agatgggaca	aacaagctaa	ccaaaaaatt	aaaagaaaaa	cctgggaaat	24000
aagaaatcca	aaggggtgct	gaaaagttct	aacatatttc	tgataatcca	gaaagccata	24060
cacatgtata	gagctgtgta	cacgctcaaa	aaacatctac	gaaggcccta	aactctcacc	24120
tatgggaaac	cctgaggctc	tgtacaagaa	gaaagtaaaa	tccagttata	aattgcttgc	24180
cgtatcattg	aaggcaatgc	cccaacattc	acacataggc	ccctggcaaa	gattggaaga	24240
tactctagtt	ctaggcattc	aagaaaatct	cttctaatac	tcagatgatc	actaaactca	24300

ccaagcagta	acttttagggg	cctgtgtgat	aaaaaataaa	aacctgaaag	aattagttca	24360
ggaaagaaac	taaacaagca	acagcaacaa	caaaaacaga	ccttgggaaa	ggggggaagc	24420
atctggtttc	cagagttatt	ctgttatact	atataaaaata	ttcaggtctc	aacaacaaca	24480
aaattacaaa	gacatgcaaa	gaaacaagta	taagccacaa	actgggggga	aaaagcagca	24540
gaaactggcc	ctgaaaaaga	ccagatgctg	gacttactgg	acaaagactt	taagagagtt	24600
atttttaaata	tgcgcaaaga	actaaaaaaaa	agtttatcta	aagaactaca	ggaaagtatc	24660
agaacaatat	ttctgatcct	tcagaagaac	cactttttgt	cactacagat	tagttctgtc	24720
tgggtctagaa	cttcttaaaa	acagaatcat	agagtataatt	ctctttatat	cagctctttt	24780
tactcaacac	aatgttgtgt	gagattttatc	catgttggtg	catgtatcat	tcccaaacag	24840
aatagaaat	tatagagata	aataggagtt	acaaaaaagt	accaaacaaa	aattctggag	24900
ttgaaaagca	caaaaaactga	attaacttga	ggggctcaac	agctgatttg	ggcagccaga	24960
agaatgaatc	agcaaactcta	aagataggtc	aattgcgaga	aagagaggga	agaaggaagg	25020
agggaaggaa	aggaggctca	gagacccaag	agacaccatc	aggcatacca	atatacatat	25080
atgagaggc	ccagaagaag	atgcagaaaa	agggtcagag	tatctgaaaa	aataatggcc	25140
ctaaacttcc	cgaacttgac	cccaaaaatt	aatctacaca	tccaagaaga	taaacaaact	25200
aaaagaata	aaatcaaagc	gatccacacc	taggtacatc	ataatcaaat	gactgaaata	25260
aaagagaga	ctctcaaaac	aggcaaggga	cttatgtaca	aaacatcttc	agattaataa	25320
caaatctctc	atcagaaatg	atgttgtcaa	taggcaatca	gatgacataa	tcaaagcact	25380
gaagaagta	gaatgtctgg	gacctggaat	gctgggtggac	acctgtaatc	tcagtatttt	25440
gggtggccaa	ggtgggagga	tcacttgagg	caaggagttg	aagaccagcc	tgggcagcag	25500
aaagaggctc	tgtctctaca	aagaataaaa	agattggctg	aatgtgggtg	tgtggacctg	25560
tagtcccagc	tactcaggcg	gctaagggtg	aaagatcgct	tgagcccagg	agttggaggc	25620
tgcagtgagc	tatgactgtg	ccactgcact	cttgcaagtg	agaccctgtc	tctataaaga	25680
aaaaatgtca	acaaaaaact	acatgcagaa	aaactgcact	tcaagaaatg	atcagtacct	25740
tgaagctctg	aagggtgctta	agactgtaga	tcaataccat	agaaaataat	ttagtatttta	25800
ggaatgtaag	aaaattaaga	cagccttggt	tgataactac	acataatact	gtaactgttc	25860
ttgcactgtt	ctggttattg	tcaagctatg	agcacaaact	gatgactgaa	atacagaata	25920
cagaacagga	tataaaatct	tatcaggtaa	agttaggcaa	gcaattacta	gttgtaattc	25980
aacttgaagg	agaaggaata	aggaaccaac	tcaaaccagg	cagcaatgaa	ttgtaaaaaa	26040
gcttaaggta	aaacaaacag	ggaaataaaa	caactcagaa	cctaagcata	tcgtaagaac	26100
ctaacttaac	aaggaggggc	ttaaactgat	tatttttacag	cttgggtgca	attatcccac	26160

aaaaaacttt	caggagtttc	accagtccat	aaactatttg	gttattagaa	aatagcttta	26220
ttgggctacc	ctctttgggt	cccctccctt	tgtatgggag	ctctgttttc	actctattaa	26280
atcttgcaac	tgcactcttc	tggtcctgtg	ttgttacggc	tcgagctgag	ctttcactct	26340
ccatccacca	ctgctgtttg	ccgccatcgc	aggcctgcca	ctgacttcca	tccctctgga	26400
tctagcaggg	tgtccgttgt	gctcctgata	cagtgagacg	cccattgccg	atcccgaactg	26460
ggctaaagac	ttgccattgt	tcctacgcgg	ctaagtgccc	gggttcatcc	taattgagct	26520
gaacactagt	cactgggttc	cacggttctc	ttctgtgacc	cgtggcttct	aatagagcta	26580
taacactcac	cgcgtggccc	aagattccat	ttattggaat	ccatgaggcc	aagaacccca	26640
ggtcagagaa	cacgaggctt	gccatcatct	tagaagcagc	ccgccaccat	cttcggagtt	26700
ctgggagcaa	ggacccccctg	gtaacaattt	ggcgaccaca	aagggaacctg	aaccgcgaac	26760
catgaaggga	tctccaaagc	ggtaatatgt	gaccactttt	gcttgctact	ctggcctatc	26820
cttagagaatt	ggaggaaaat	actgggcacc	tgtcggcccg	ttaaaaacga	ttagcatggc	26880
ggccagactt	tagactcagg	tatgaggcta	tctggggaag	ggctttctaa	caaccctcaa	26940
gccttctggg	ttgggaacct	tggctctgct	ggagccagct	tccactttca	attttcctgg	27000
ggaagccaag	ggctgactag	aggcagaaag	ctgtcgtccc	gaactcccgg	cattagccgg	27060
tgagatcat	gtcgcagcca	gaagtctcta	ctcaacagtc	gcccatgcgt	gcgctcctac	27120
gttcccttct	gtccacacac	tcctgggtcc	caaccacgac	tttcttgaaa	gtgtagcccc	27180
aaaattctcc	ttacctctga	atctacttcc	tctgatccct	gcctcctagg	tactaatggg	27240
tgagactttc	atttcctcta	gcaagttgta	tctccaaagg	gatctaagga	agctctatgc	27300
tcgcgccctta	ggcatctagg	ctataaacc	agggagtctt	gtccctgggtg	tccctcctga	27360
tttaggtata	cagctctaga	catgggcagt	tatgtgggac	ctgttcccca	ccacccttgc	27420
cagggcccca	agtttgtaaa	tggctaagag	aggaaacaga	gagagacaga	gagaaagaga	27480
cagtgagaga	cagacagaga	cagagagaga	gagagacaga	gaggagagag	agagagacag	27540
ggaggacagg	gagagagaca	gagaggagag	ggagagagac	aaagaggaga	aagaggcaga	27600
gagacaaaca	gggagtcaga	gaaagaaaga	caaagataga	aatagtaaaa	aaaaacagtg	27660
tgccctattc	ctttaaaagc	cagggtaaat	gtaaaacct	taattgataa	ttgaaggtct	27720
tctccgcgac	cctataacac	tccaatacta	ccttggtgtc	agcgtaaaca	agggcgtagc	27780
ctgaaaacac	taagaccact	gacaacccat	agccttccta	tcaaaaatcc	ttaacatcca	27840
gtgacctgcg	gatggcccaa	atgcattcaa	tctgtagcgg	caactgcttt	gctaacagaa	27900
aaaagtagaa	aagtaacttt	tagaggaaac	ctcattgtga	gcacacctca	ccggttcaga	27960
attattctaa	gtcaaaaaag	caaaaaggta	gottattaac	tcaaaaatat	taaagtatgg	28020

ggctattctg	tcagaaaaag	gtaatttaac	actaaccact	gataattccc	ttaaccctgc	28080
agatttcctt	acaggggatt	taaatcttaa	ttaccataca	aaggtccgac	cagacctagg	28140
aggaactccc	ttcaggacag	gatgatagat	ggttcctccc	aatgactga	ggaaaaaacc	28200
acaatgggta	ttcagtaatt	gatagggaga	ctcttggtga	agcagagtta	gaaaaattgc	28260
ctaataattg	gtctcctcaa	atgtcagagc	tgtttgcact	cagccaagcc	ttaacgtact	28320
taccgaatca	aaaagactat	ctcaatcctg	actcaaaaagc	ttacttatac	cctctctgaa	28380
acgaatttgc	ctaagaactg	ttgtttatgg	gaatgcatct	tgatggagca	gctggggtgt	28440
tatgaaatac	tcaggaactc	agcctagctc	taggactcac	ccctgagcac	aaaggcaatg	28500
ttgggcacgc	tggtaaagga	ccactagaat	ccagcagccc	ggaccctttt	ctttgtgatac	28560
aagaaaggcg	ggaaaagggg	tgagggtgc	tacatcagt	agcataacta	atccgataag	28620
cagaggtcca	tgggtggtta	cacaccccg	aaaggaataa	gcattaggac	catagaggac	28680
gctctaggac	taatgctcat	cggaaaatga	ctagtgggtgc	tggcatccct	atgttctttt	28740
tcagatagg	aaacgttccc	ctcaaggcaa	aaacaccct	aagatgtatt	ctggagaatt	28800
gggaccaatt	tgactctcag	atgctaagaa	aaaaaagaca	tattcttctg	cagtaccgcc	28860
gggcaacgat	atactcttta	agggggagaa	acctggcatc	ctgagggaag	cataaattat	28920
accacatct	tacagctaga	cctcttttgt	agaaaagaag	gcaaagtgtg	tgaagtgtca	28980
tcgtacaaa	ctttcttttc	attaagagac	aactcgcaat	tatgtaaaaa	gtgtgattta	29040
tgccctacag	gaagccctca	gagtctacct	ccctacccca	gcatcccca	gactccttcc	29100
caataata	aggaccccc	ttcaacccaa	acggtccaaa	aggagataga	caaaggggta	29160
caactaac	caaagaatgc	caatattccc	cgattatgcc	ccctccaagc	ggtgggagga	29220
gaattcggcc	cagccagagt	gcacgtacct	ttttctctct	cagactttta	attaaaatag	29280
acctaggtta	attctcagat	aaccctaatt	gctatatatt	tgttttacaa	ggttttaggac	29340
aatcctttga	tctgatattg	agagatataa	tgttactgct	aatcagaca	ctaaccocaa	29400
atgacagaag	tgctgccgta	actgcagcct	gagagtttgg	cgatctctgg	tatctcagtc	29460
aggtcaatga	taggtcgaca	acagaggaaa	gagaacgatt	ccccacaggc	cagcaggcag	29520
ttcccagtgt	agaccctcac	tgggacacag	aatcagaaca	tggagattgg	tgccgcagac	29580
atttgctaac	ttgcgtgcta	gaaggactaa	ggaaaactag	aaagaagcct	gtgagttatt	29640
caatgatgtc	cactataaca	cagggaaagg	aagaaaatcc	taccgccttt	ctggagtgac	29700
taacggaggc	attgaggaag	catacctctc	tctgtcaact	gactctactg	aaggccaact	29760
aatcttaaag	gataagttta	tcactcagtc	agctacagac	attaggaaaa	aacttcaaaa	29820
gtctgcctta	ggcccgaac	aaaacttaga	aacctattg	aacttgcaa	cctcagtttt	29880

ttataataga	gatcaggatg	agcaggcaga	atgggacaaa	tgggataaaa	aaaaggccac	29940
cgcttttagtc	atggccctca	ggcaagcgga	ctttggaggc	actggaaaag	ggaaaagcta	30000
ggcaaataca	atgcctaata	gggtttgctt	ccagtgcggt	ctacaaggac	actttaaaaa	30060
agattgtcca	aatagaaata	agccgcccc	tcgtccatgc	acctcgtgtc	aagggaatca	30120
ctgtaaggcc	cactgcccc	ggggacgtag	gtcctctgag	tcagaagcca	ctaaccagat	30180
gatccagcag	caggactgag	agtgcccg	gcaagcacca	gcccattgcca	tcaccctcac	30240
agagccctgg	gtatgcttga	ccattgacgg	ccaggaggct	aactgtctcc	tggacactgg	30300
tgtggccttc	tcagtcttat	tttctgtcc	cagacaacgg	tcctccagag	ctgtcactat	30360
ccaaggggtc	ctaggacagc	cagtccactag	atacttctcc	cagccactaa	gttgtgactg	30420
gggaacttca	ctcttttcac	atgcttttct	aattatgcct	gaaagcccaa	ctcccttggt	30480
agggagagac	attctagcaa	aagcaggggc	cattatacac	ctgaacatag	gagaacaccc	30540
gtttgttgtc	ccctgcttga	ggaaggaatt	aatcttgaag	actgggcaac	agaaggacaa	30600
gttggaagcag	caaagaatgc	ccgtcctggt	caagttaaac	taaaggattc	tgctccttt	30660
cccaaccaa	ggcagtacc	ccttagacc	gaggctcaac	aaggactcca	aaagattaag	30720
gacctaataag	cccaaggcct	agtaaaagca	tgcaatagcc	cctacaataa	tccaacttta	30780
gagtagacaga	aaccagtg	acagtggagg	ttagtgcaag	atctcaggat	tatcaatgag	30840
gtcactgtcc	ctctatacct	agctgtacct	aacccttata	ttctgctttc	ccaaatacca	30900
gaggaagcag	agtggtttac	agacctggac	cttaaggatg	cctttttctg	catccctgta	30960
gtcctgact	ctcaattctt	atttgctttt	gaagatcctt	caaacccaat	gtctcaactc	31020
acctggactg	tttcaccca	agggttcagg	gatagcccc	atctatttgg	ccaggcatta	31080
gccaagact	tgagccggtt	ctcatacctg	ggcactcttg	tcctttggta	tgtggatgat	31140
ttttactttt	agccgccagt	tcagaaacct	tgtgccatca	agtcaccaa	gtgctcttaa	31200
atcttctcgc	tacctgtggc	tacaaggttt	ccaaaccaa	ggctcagctc	tgctcacagc	31260
aggttaaata	cttagggcta	aaattatcca	aaggcaccag	ggccctcagt	gcctattctg	31320
gcttatcctc	atcccaaaac	cctaaagcaa	ctaagaggat	tccttgacat	aacaggtttc	31380
tgccaaatat	ggattcccag	gtacggcgaa	atagccagac	cattatatac	actaattaag	31440
gaaactcaga	aagccaatac	ccatttagta	agatggacac	ctgaagcaga	agcggctttc	31500
caggccctaa	agaaggccct	aacccaagcc	ccagtgttta	gcttgccaac	ggggcaagac	31560
ttttctttac	atgtcacaga	aaaaaacaga	aatagctcta	ggagtcctta	cacaggtcga	31620
tgagcttgca	acccatggca	tacctgagta	aggaaattga	tgtagtggca	aagggttggc	31680
ctcattgttt	atgggtagtg	gcggcagtag	cagtcttagt	atctgaagca	gttaaaataa	31740

tacaaggaag	agatctgtgt	agacatctca	taacgtgaac	ggcatactca	ctgctaaagg	31800
agacttggtg	ctgtcagaca	accgtgagga	aagtaactaa	aatcgtaa	ccccatggcc	31860
ctcccttate	atatttttct	ctttactggt	ctcttacc	ctttcactct	cactgcaccc	31920
cctccatgct	gctgtacaac	cagcagctcc	ccttaccaag	agtttctatg	aagaatgcgg	31980
cttcccagaa	atattgatgc	cccatcaaat	aggagtttac	ctaaaggaaa	ctccaccttc	32040
actgcccaca	cccatatgcc	ccacaactgc	tataactctg	ccactctttg	catgcatgca	32100
aatactcatt	attggacagg	gaaaatgatt	aatcctagtt	gtcctggaag	acttgaggcc	32160
actgtctgtc	ggacttactt	caccatact	ggtatgtctg	aggggggtg	agttcaagat	32220
caggcaagag	aaaaacatgt	aaaggaagta	acctcccaac	tgacccgggt	acatagcacc	32280
cctagcccct	acaaaggact	agatctctta	aaactacatg	aaaccctcca	taccatact	32340
tgcttggtaa	gcctatttaa	taccaccctc	actgggctcc	atgaggtctc	ggcccaaac	32400
ctactaact	gttggtatgtg	cctccccctg	tatttcaggc	catgcatttc	aatccctgta	32460
ctgaacaat	ggaacaacta	cagcacagaa	ataaacacca	cttccgtttt	agtaggacct	32520
ctgtttcca	atctggaaat	aaccataacc	tcaaacctca	cctgtgtaaa	atttagcaat	32580
ctgttagaca	caaccaactc	ccaatgcac	aggtgggtaa	ctcctccac	acgaatagtc	32640
gcctaccct	caggaatatt	ttttgtctgt	ggtaccttag	cctatcgttg	tttgaatggc	32700
cttcagaat	ctatgtgctt	cctctcattc	ttagtgcccc	catgaccatt	tacactgaac	32760
agattttata	caattatggt	gtacctaa	cccacaacaa	aagagtactc	attcttcctt	32820
ctgttatcgg	agcaggagtg	ctaggtggac	taggttctg	cattggcggg	accacaacct	32880
ctactcagtt	ctactacaaa	ctatctcaag	aactcaatgg	tgacatggaa	tgggttgccg	32940
actccctggg	caccttgcaa	gatcaactta	acttcctagc	atcagtagtc	cttcaaaatt	33000
gaagagcttt	agacttgcta	acctctgaaa	gaggggggaa	ctgtttattt	ttaggggaa	33060
aatgttggtta	ttatgttatt	ttagcggaag	aatgttggtta	ttatgttaat	caatcctgaa	33120
ttgtcacaga	gaaagttgaa	gaaattcgag	attgaataca	acgtagaaca	gaggagcttc	33180
aaaaacacca	gaccctgggg	cctcctcagc	caatggatgc	cctggattct	ccccttctta	33240
ggatctctag	cagctcta	attgatactc	ctctttggac	cctgtatctt	taacctcctt	33300
gttaagtttg	tctcttccag	aatcaaagtt	gtaaagctac	aaatcgttct	tcaa	33360
ccccagatga	agtccatgac	taagatctac	cgtggacccc	tggaccggcc	tactagccca	33420
tgctccaatt	gtaatgatat	cgaacgcacc	cctcccagag	aaatctcaac	tgcaacaacc	33480
ctactatgcc	ccaattccgc	aggaagcagt	tagactggtc	gtcagccaac	ctcccaaca	33540
gcacttgggt	tttctgttg	agtgggggga	ctgagagaca	ggattagctg	gatttcctag	33600

g̃ccgactaag	aatcccaaag	cctagctggg	aaggtgacca	catccacctt	taaacactgg	33660
gcttgcaact	tagctcacac	ccgaccaatc	aggtagtaaa	gagagctcac	taaaatgcta	33720
attagacaaa	aacaggaggt	aaaaaaatag	ccaatcatct	atcgctgag	agcacagcgg	33780
gaaggacaat	gatcgggata	taaaccagg	cattcaagcc	ggcaacggct	accttctttg	33840
ggtccccctc	ctttgtatgg	gagctctctc	tgtcttcaact	ctattaaata	ttgcaactgc	33900
aaaaaaaaaa	tagcttaatt	gaagaataaa	ttaatacaat	aaaaggaata	cattttaagt	33960
atacagttca	aactgtaaca	gtgttacagt	ttcaagagga	ccccttcaac	aagatattgg	34020
gcatttccat	catgccctaa	aagtcccttc	ttgtccctta	ctggttgggt	ccatctctac	34080
tacaccctcc	tgacctggcc	cagaccttgg	cctcagaaga	atcatttttt	tgtcactaca	34140
tattagtttt	gtctgttcta	gaacttctta	aaaacagaat	catagagtat	gttctctttg	34200
tattggttct	ttttactcaa	tgtaatgttc	tgtgacattt	atccatatta	ttgcatgtat	34260
tattcctttt	aatcctgaat	agtatgctgt	tttaggaata	taatgcaatt	gtttattcat	34320
ttagctgttg	acagatatct	gagctattat	gatggatatt	atgaataatt	ctgctatgaa	34380
ccttctgta	caatgttttc	tcggacatat	attttcattt	ttcttgagtg	gagctgttag	34440
aactgttggg	tcagaaagta	agcatatggt	gaattttgaa	agaaactggg	aaactcctgt	34500
ttaaagtgat	ttgtaccatt	ttacactcct	actaataatg	tatgagagtt	atatttgctc	34560
gacagccttt	ttactacttt	gttaatcttt	ttagtactgt	caaccttttt	aatttatcca	34620
ttctagggaa	cgtgaagtag	tatctcactg	ttattttcat	tttcctgatg	agtaacaata	34680
ttgtgtatct	tttcatgtgc	ttattagcca	ttcctatatc	ttttgtgaaa	tagttaactt	34740
taatttgtaa	ctaaagggtgc	tttcctgagt	ttcaggtagt	aagcctattt	ccctcaagtg	34800
aataaactac	agtcttggaa	tgaaaaatta	aacacagtgg	agacattttt	tgtataagtt	34860
gttttactct	gtgtatgtct	ggtttgctta	gtctattatt	atatgcccc	tgaaagcaaa	34920
cacagtgcct	atttcactaa	tgagtatcac	tagcacatag	aactgtgcct	gccc aaagca	34980
tgaactcaat	aaatatgtta	atgtgtatgc	atgcacatac	atctacatgc	atgtacatct	35040
atacacacat	ataaacatat	attaattttt	agaccacaaa	atctaagaaa	actaattctt	35100
gagcctctgg	tttgaagaat	tctcaaatta	ttaacatatc	tttatgttcc	actccacatc	35160
cactgtacct	gaaatagccc	tactgttcta	ctttggtaaa	tcaggcaa	at	35220
aaataattaa	gattccaact	aattttaaaa	tataatttga	aagttaacaa	tgaaatacat	35280
tacataaaaa	gaaaatttta	aataaaagca	aaactaaacc	caataagagg	aaagaaagtt	35340
gggctgtatt	tctttaatcc	tttaaaattc	aatcacaca	atgctccaat	gaaatcttca	35400
ttaactgaac	caaactatgc	ccatgaaaga	tctcatatgc	aactgctaaa	acctcaataa	35460

ācatattcat cttcttgcaa aaaagatatt tctttataat atgcacatgc agtatatact 35520
 attttgaggc agatttgtagc ttttagtcctt gttccattgc ttaccggctg gctgtccttt 35580
 gtctgggtcat tgacctccaa cttaaaaaaat aatacttgcc ttgtctaccc cacagaagtg 35640
 ttatgaaagt caaacaaggt agcataaagg tattttacaa gatataaagt gctataatac 35700
 agattttaaa aatcactcta catcccataa tactttgttg tacaatttta gagcaatagt 35760
 agaaaataac aattattgcc taattgaaaa tccagtcccg aattccataa aatgtatgat 35820
 atgaacatta tagtacatca tattacgagc cccaaataat cactgcttat atagttgggt 35880
 aggatttcct tagtttggtc atatagttta tatatttatg cagtccctat tttgtgagag 35940
 gcattgtgag gagcataaag acataagcac agtacagagc cttagcttct ctacatttac 36000
 taaagaagac ttcttcttggt gtattttaatc aatatttaaa gtattctggg aagaaatgaa 36060
 attaacttca tagactgacc ttagattact atcattacaa aaagatgcct gagtgatctg 36120
 cttttaacat accagtattt atcttataac tgttatattt acttgaatca gaagtgaagt 36180
 cttttaagc actaagcatc cattctatac tttcttgtct ttacatatga gatacaaac 36240
 atatttttaa aacttttatt tacttttatt ttttagagac ggagtcttgc tctgtagccc 36300
 aggctggagt acagtggcat gatcttggct caccacaatc tccacctcca cttcccaggg 36360
 tcaagtga ccaatcatc ttttaagcac agattctcaa catgtatcct agcatgctac 36420
 ggcataact aggggtgtgaa ttaagtatta aagacagctt accccaaata ttactgtaac 36480
 tatatatctt aaatgaaaaa gaacatatta acaactatac ttggatggga ttctgggagc 36540
 taacccatcc ctctctcccc tttctccaa attccatctc ctattaacac accagctctc 36600
 ctgagctaag cagctcctgg ggttggggaa ggggtgtacat ggagaaagct agaacctcta 36660
 cagtgttttc ctctctggga ggaactagca ggcatacgaa cagaaaaagc tgaataaaaag 36720
 gctgaatcct ttctattcct gaggcagaca gagagaagac cagggaacaa agagacttcg 36780
 accaagagcc ctgccaggta ttgatacctt tgatactgag aaaatatctg ggatatgaaa 36840
 taaaaatgct aaataagtat ctttgaaata ggggtaaaag aataaagggt cttgatgagt 36900
 aaaatgggta gtatttttta ataacctgat aatgagcttt aggaaaaggg aagggtcaacg 36960
 ttatggaatg aaaacacaga ggtaccaa attaaaagcat aaaaaaaagt ggaggggggg 37020
 aaccaataa cttcatcaaa ctagcaaata acttagtatac atttctaatt agaaacgcta 37080
 gaaggaaatc acttagatct gataaagact aggtataat tctaactgat gaaacactta 37140
 aactgtatca attaatacca gaaaacaaac acagaaaagt ctactagaac catcattatt 37200
 cagcacagtc ttggtaatgc aatactataa tagcaatgca ataaagcaag aaaaaaaaaa 37260
 gtttgtaaaa acacaatagg atgagatttt tgtttttcca atgccataaa taactagaaa 37320

tggaaacaaa	ataaagaaaa	acaaaatcta	caaaacacct	ggaaataaaa	agaaaaatgg	37380
tctatttgaa	gaaaacctta	aatctatgc	agaacataaa	acaaaatctg	aataaaaaaga	37440
aatatcatgt	tottgtctgg	gaagacttaa	tatcataaga	aagtgaatta	tatcaaaatt	37500
taaatcgaaa	tttaatgtat	ttccatctct	aatcagacag	gacactatgg	ggaactgaat	37560
aagtgatttt	aaaagtcatg	gaaaattaat	aactgagaat	aaccatgaaa	agtatgaaaa	37620
aaggagacaa	atgaattgct	ccaacagata	tcagaacgct	aaaattaaat	aaaaatacta	37680
ctaggataag	aaaatacata	tactgatgta	atgaataaag	aatccagaat	tagattccag	37740
taagtcaaac	tactttacta	taaaccaggg	gtggcatatt	catccagtgg	gaaaaggaca	37800
gtaagaagtg	agtaaactat	ggcccactgg	ccaaattgtg	gcctctgcct	atttttgcaa	37860
ataaagtttt	actgggacaa	agccaagcct	atcatttgca	aattgtctat	aaatattttc	37920
atgttacaga	atcacacagt	ttcaacagag	accatcttgt	ctacaaagct	gaaaatatct	37980
actatctggc	ccttgaagaa	agtttgccaa	accttagttt	atataataaa	agatcagcta	38040
tgtcatagac	acctatctca	cacaacacat	tgtgggaaag	gaccttcttt	tttttttgag	38100
aggggtctt	gctctgttga	ccaggctgga	ctgtagtggc	atgatcatgg	ctcactgcag	38160
cctcaacctc	ccaggttcaa	gtaatgctcc	caccacagaa	tcccaaacag	ctgggagaga	38220
tgtgtgccac	tacgcctggc	taaggggcct	ttttaacaga	gaaagaaatc	cacatactac	38280
agagaaaaag	aagggcatat	ttgatataata	tttatatttt	ttatatagat	atcataaaaa	38340
tcaagatgaa	ttatacagtt	atattttgca	atgtgtttga	cggtaaaagt	ttaatatacta	38400
tataaaattat	tttataaaat	atctttaata	tatttataga	tattataata	taaaatatct	38460
ataaaattat	tttataaaat	aaaaagttaa	gaagaaaaga	taggcaaaac	aaaatacagt	38520
gcaatttaca	gaaaaccaag	tccaaatggt	caacaaagat	aaaacagatt	tataaaactca	38580
ctaagtgtga	gagaattatt	agttaaagta	aaaatatctc	tctataccca	caatactact	38640
aaaaatcaga	gttataatgc	cctattgctg	gtggagatgt	aaggggagaa	gcatgctctc	38700
atatactggt	agtgaaaatt	taaactaata	catttttgaa	aagtaagctg	gcaatttttt	38760
ttttaatctc	taccttttga	tgcaaaaact	catttttggg	tacctattcc	ataccttaaa	38820
aaaaatacat	atgcttactg	tagtactggt	tataatggta	aaaactagaa	aaaaagaaaa	38880
cttgatagtg	aatactgaac	aaattacagt	gcatctacag	attaaacata	atgcagccat	38940
taaaaaagaa	taaattaggc	tgggtgcggg	ggctcatgcc	cgtaatccca	gcactttggg	39000
aggccaaagc	aggcggatca	cttgaggcca	ggagtctcag	accagcctgg	ccaacatggc	39060
aaaaccctgg	ctctacaaaa	aatacaaaaa	ttagtcgggc	atggtggtgg	gcacctgtag	39120
tcccagctac	tcaggaggct	gaggcaggag	aatcacttga	gcctggggaga	cagagattgc	39180

agtgagccaa	gatcatgcc	cagcattcca	gtccagggtga	cagaacgaga	ctctgtctca	39240
acaaaaagaa	caaattaaac	cctacaactc	atcaacaaaa	atacccaaac	ccaattcaaa	39300
aatgggcaaa	ggacttgaat	agacatttct	tcaaggatga	taaacaagca	catgaaaaga	39360
tgcagagcac	tattcattag	tgattacatc	ccacatgcat	taggatggct	agtatgaaga	39420
acagaaaata	ataaatattg	gtgaagatct	gaaaaacaga	aacctttgtg	cactgttggt	39480
gggaatgtaa	agtgggtacag	ctactacgga	aaacagtatg	gccattcctc	aagaaaataa	39540
aaataaaatt	atcttatgat	aggaatatgc	atttctgggt	aaatacccca	aataactgaa	39600
aacagggtgt	acaccattt	caacatttac	atgtcaattc	aactgggcca	gaatacccag	39660
atatttggtc	aaatattctt	ctggatgctt	ctatatatat	gttttttggc	tgaggttaac	39720
atttaaattg	gtggattctg	agtacagcag	attaccatcc	acaatgtagg	tgggcctcat	39780
ctactcagtt	gaaggtctta	cagaaaaaga	ctgacctccc	ttgagcaaga	aagaattcag	39840
gcaacagact	gcctttggac	tcaactgcaa	ctcttccttg	agtcaacagc	ccatccccatc	39900
ccctggcctt	ggtgagtcca	gggtctgatg	aggtaggctg	cagactcaag	gaagagctgc	39960
gaaaaccagg	aaagccaatt	cattaaaata	aatctctctc	tacacaaaca	cacacacaca	40020
ctaccaccac	caccatgatg	gttctgtttc	tctggagaat	gctaatacac	ccctgttcat	40080
ggcagcatta	ttcacaatag	ccaaaagggtg	gaagcaactc	cagcagatga	atggagaagc	40140
gaaatgtggt	atgtatatac	aatggaatat	tattaagcct	ttaaaaagtg	gaaattatat	40200
ctatctatat	ctatacacac	atactcacac	acacacacac	acatttatag	aagacagggt	40260
ctcaccatgt	tgtcaaggct	ggtctcgaac	tcctgggctc	aagcaaaccg	cctgcctcag	40320
cttcccaaag	tgctgagatt	acatgtgtga	gccaccacac	ccagccaaaa	aaaggacatt	40380
ctgacacata	atacaatata	gataaacaat	gaggacatca	tgatatgcga	aataagcctg	40440
tcacaaaaag	gcaattagtg	tatgattcct	cttgtatgag	gtacctatgg	atgtcaaate	40500
cataaagtag	aatggggaaa	cagagagttg	tttaatgggt	atagagtttg	ttttgcaaga	40560
agaaaagagt	tttgagaat	gaatgtacaa	cagtgtgaac	ataattaaca	ctactgaaaa	40620
tgggttaagat	tataaatatt	atgttacatt	tattttacca	tgattaaaaa	ttaaaacaaa	40680
ataatattaa	ggaaaaatac	tataaataac	aacaacaaaa	aaaacacctc	aagcaactta	40740
cattcacctg	ggaaacagaa	tacatcctat	tctgctagag	atatactctg	agttcaaaat	40800
ttattacaaa	tgatgttgtg	tatctttttg	aaatgactga	aaaactaaat	taaaagcaat	40860
aatattcagt	ttactaacca	gtaagtcctt	ctttcatggt	tcctgacttt	tctgtaagat	40920
gttattgcaa	gatatctact	aaaatggaaa	acaactgaaa	aggcaaaatt	ataatttctt	40980
atcaacatcg	ctaaaaccct	ggaggggaag	aatcctaaca	aacatggcca	taatttgcca	41040

catattttcta	ctgtcctcac	ttttcaaaat	ccagaaatca	acattttctgg	aaacaaaaca	41100
gagtctaaaa	tttggctcct	tcttcagttt	agaaggtgcc	aagttaatcc	ctgacatcct	41160
agttttccatt	ttcaaaaatg	tacttttttct	ctccccaac	cggtatctag	attctttaa	41220
attttttagca	catagaagtt	aaatagattt	gcttaaccaa	aatagccagt	aaacctcca	41280
aaagaattaa	aatattaatg	gcgctttaat	gatacaaatg	aacaacttta	cattcaatcg	41340
tcaatgggaa	aggaagcaga	attctgagga	ttatgaaagt	aaacaaaacg	aagttcaaat	41400
tctacttttat	tttacttttt	tgtaactaat	gaacaacttc	ttccaaagac	aagtaggaaa	41460
tacaaaaatt	agccaggcat	ggcacatgcc	tgtagtcttg	gttacttgga	aggctgaagt	41520
gggtggatcg	cttgagccgg	gaaggcagag	gctgtagtga	gctgagatca	catcactgca	41580
ctcaagcctg	ggtgacagag	caagaccctc	tctggggaaa	aaaaaaaaaa	aaataggctg	41640
ggcgcagtgg	ctcacacttg	taattccagc	actttgggag	gctgaggcag	gtggttcacc	41700
cgaggtcagg	agttctagac	cagcctgacc	aatatggtga	aacctgtct	ctactaaaa	41760
tacaaaaatt	agccaggcat	ggtggtgggc	aattgtaatc	ctagctactc	gggaggctga	41820
ggcaggaaaa	tcgcctgaac	ccaagaggcg	gaggtttcag	tgagccgaga	ttgcactagt	41880
gcactccagc	ctgggcgaca	gagcaagact	tcatctcaaa	ataaataaat	aagtaagtaa	41940
ataaaattaa	aaaatatata	aaaataaaac	aaagataagt	aggaaccatc	cttttttttt	42000
tttttttttt	ttttttttta	agatagggtc	tgtttctgat	gccaggctt	gagtgtagt	42060
gcctgatcat	ggctcactgc	aaccttgacc	tctcaaatac	aagtgactct	cctacctcag	42120
ctcccaagt	agctgggact	acaggtgctt	accaccccat	ccggctcatt	taaaaaaatt	42180
tttttgtaga	ggtgggtct	cactatgttg	tatccaggct	ggtctcattt	taactttatt	42240
agaaaacaag	cattgtttta	tcagcttctt	gtttttttta	aactaaaaat	aacactgcta	42300
ggttgtttct	atgaagattc	tctaaattta	tttataacct	taagaataac	atgtagaaca	42360
aagtagatga	ctgaatgatc	tttgttgaat	aaatatgaat	ggatattcaa	ataattaaaa	42420
atctcttaag	atctcccatt	ctttacagga	tacagagaaa	actcgttaat	atggcctgac	42480
ttttaccttt	gcagccttat	ccaaactctg	tgggtcaagac	aaacaggttg	tccttatact	42540
tacaacgtcc	ccctttgcct	acaaagctct	tctcatgact	ctttgcctat	cttaagttca	42600
cctatctgtc	aaatctctgg	gaatgcaaca	tttctcaag	gtagccttct	ctcctcccaa	42660
actagaacaa	attcttcctg	gggcattagg	tttttattgc	actgtatgtc	tcttcttcac	42720
agcaatcaca	gttccaatgt	tatatttgta	ttcttagttg	atttgtttct	ttccaccttt	42780
agactataac	cttctaaggg	gtcacacata	atatcgatca	tcagttgtat	cccttggtgca	42840
tagcacaggg	catggcaggc	aaatatgtgt	gtaaataaac	ttgttgaaatg	aatcaatgag	42900

acacactttt	cttaccctaaa	gtataatggc	aggataacat	ttatcaatct	attgcttctt	42960
gaaaaacaga	tatgatgtgc	ttaattttca	ttttacatct	caaataccaa	tgccctaagga	43020
attcacagtc	atttttacaaa	tcttttttgac	aatgccttc	attaatcacc	acctgtttac	43080
aagtgcataa	taacattttg	gttacattct	gtaacatttc	ctgcacttaa	tgtcatctct	43140
agaatactgg	ctaatatgaa	gcacctggac	ttcaggaaca	caaacctgaa	actaacacac	43200
caaactaaac	tgttatgtaa	atgacagaaa	tgacacattt	tggtctgcaa	catctctaga	43260
tggtcttttg	accaattcaa	cttttaccac	taaaaatcgg	tcacctgact	atagtcattt	43320
tgagctcatg	ataaatgaat	tacagatgaa	aaataaatag	tttgatgaca	atctttacaa	43380
aagtttatct	tcaaagaata	ccaccagtca	caggtattct	aggctcctat	caacttattt	43440
ggtcagggca	gacttcactt	ttcatgataa	ttatgttctg	aaaattctac	aaacttaatg	43500
attacaaaca	aaagtcatag	tttgctcata	aatcaggcct	aggctctggat	tctagttctt	43560
caatttttca	tttgttcact	gaggcaagtg	acttaaaatt	ccctagcctc	agtttcctca	43620
catgtaaaat	cagataatga	ttcctattcc	taagatgggt	ttgaggcttc	aacaagataa	43680
gatgggcctc	actcaagcat	gtcagctact	ctgtctctct	ctctccgggt	atgcagaaat	43740
tctattagga	ttctgcaaag	taaaataaat	atttcagtaa	aaattatgcc	ctttattaat	43800
gatctagat	tttcagattt	tccttaaatt	tacttagtaa	cttaagggtc	caaataattat	43860
agagatttgt	atctagtatt	ttaaagaaat	gaaaggtgtt	aatcaaaatg	ctgcacaaat	43920
aatgctaca	tttaacaaac	agaatatcac	aaccatacaa	actaatcaga	tataaagaag	43980
taagcaacag	aaatctgatg	ttgcctttag	atcacacaat	taggcaaaca	aaaatagagt	44040
tccatcctcc	tttgggtcaag	gccatggttg	aagactgaat	accaaataag	gaaataggaa	44100
aagccaggaa	atggcaaatt	agcaaaaact	ggactcctta	atttttatat	tcattttcat	44160
atctcacttc	taaaacttta	attaaattca	aataaaaacc	aaaatggaac	tgagataaag	44220
ccaaaaggaa	agttatgtag	gtcaaatgag	aacctatatt	gtccttaggc	tctttgttgc	44280
tttctgttta	aggaaaaact	gcccaagtgc	cttgacacat	taaagatcaa	gcaggagggt	44340
ctgccgagag	tccccatctg	gcagccaggt	tttgtcaagc	aaattttgag	aattctctac	44400
cctcccactt	tctatctaat	tatagcactt	tataaaaacc	attctctctc	tgtctctgtc	44460
tctctctctc	tctctctctc	acacacacac	acacacacac	acacacacac	acacacaccc	44520
tttctctctc	tctctctctg	aaacttatct	gtattataat	aacacaacac	taggtatgga	44580
ttaatctgac	aattttcccc	taaaacagaa	taaattcaaa	aaggaaaacc	tttctctgt	44640
acacatgcac	tatattctga	caataataat	tcctaaatta	agtataatac	attttcctta	44700
caggagttta	aagaagttac	agtaaagaat	ctcttgata	aatatatatg	ccagaacttg	44760

aCccaaataa gtgctgagag gtataaatct caaaacagtt tccggactct ttgtgaaatg 44820
 tcttcagagt ctgcgatata ttttcttcaa ctaaattata caagtaagat attttgctgg 44880
 gctgtgggaa tgccttacgg catgttactg tggagctcat ggtaaaatag aaagaatata 44940
 aataattaaa ataaaattga caaatgataa atgatttaat aaattagaaa ttcaaagcc 45000
 gggcactttt ctagaacctg gacacaaagc atgaacctaa caataacccc gccttcatga 45060
 aaaatatgga ctatttgaaa attatacctg caacactaaa taaatattct tcattcttcc 45120
 agtatattga gatgtttact ttcaattaga caatttgctt tcctctctga acacatagtt 45180
 atgtgatggc tctataaaag attttaaaat aactatagaa ggaactattg gtaaagactg 45240
 tgggatacta aaaatggcta caaagaaagt tatgacaaaa cctctgagtt tgaatggaag 45300
 tcctactaga ttagagtcta agcctgtgac attatgcttc tggttcttgt tcttaaatgc 45360
 ttttctcatt aatagtatgt aacttacttc ctggaatgcc attcattaaa aaaatattta 45420
 attatttgcta aatgtcaata tttatgccag cactttttaa gtacagaaac atggagtttc 45480
 ttacctcat gcaaatatgc tgtgagaaag acttaagagc ctattgccta ctttgtggta 45540
 cacactgaa gactcaccat ccaaaacaaa cagacttagt aaattcttgt gatttgcagt 45600
 atttctgttc tataagggtta ccacaaacac tgaaatcatc gctcctgggg gaatacaagg 45660
 tatgttttcc gtgagccctc ggtcacaaca tgttcattaa ctgatcaata cataaccttg 45720
 tctatgtgt gtttctgttt aaaaagagca cttcagtgtc acatttggag tctgttttaa 45780
 acagcaaaat cactaataaa aagcacaaaa atgtaaaagc atggcactac atacactgtg 45840
 acaagaaggc ttgtttatag tatgacagct gagacaagaa ggtagagcct cgctttgatc 45900
 acctctgct gggaaatgag catcaggtga atcaattttt caccactctg aatgaccgta 45960
 aaagtgtcc aagtactgac tttgggggtta cacataaatt ttagtaagca tgtgaatctg 46020
 ccaatatgaa atctacaaat aatgagtacc aaatgcataat gagtcaaata tttcagtgcg 46080
 gtatctgact tgattgccac tgaaagacac agtttggaac acccctaata aataccgttt 46140
 agttactatg cagacaaaga gttctacact agagtgttc aattaagatg tctgaggctt 46200
 tcataaatgg atgtttttta aaatgttatt tcctacctga tatattctaa aggggatata 46260
 acgaaatcca ttttcttctg caggatatcc catgagtttc cgattgatgg cccaaaactg 46320
 gtcaaatctg tctgtaatatga 46340

<210> 67 <211> 773 <212> DNA <213> Homo sapiens <400> 67
 actgagagac aggactagct ggatttccta ggctgactaa gaatccctaa gcctagctgg 60
 gaagggtgacc acatccacct ttaaacacgg ggcttgcaac ttagctcaca cctgaccaag 120
 gaagggtgacc acaccctcct ttaaacacag agcttgtaac tcagctcaca cccgaccaat 180

caggtagtaa agagagctca ctaaaatacc aattaggcta aaaacaggag gtaaagaaat 240
aatcaaata tctatcgct gagagcacag ggggaggagc aatgatcggg atataaaccc 300
aggcatttga gccagatcag gtaaccctct ttgggtcccc tcacactgta tgggagctct 360
gttttctactc tattaatatct tgcaactgca cactcttctg gtccatgttt gttccggctc 420
aagctgagct tttgctcgcc gtccaccact gctgaatgcc gccattgcag acctgccctt 480
gacttccacc cctccggatc cggcagagtg tccgctgcac tcctgatcca gcgaggcacc 540
cattgccact cccgatcagg ctaaaggctt gccattgttc ctgcacagct aagtgcctgg 600
gttcactcta atcaggctga aacttggtcg ctgggttcca cggttctctt ccatgactca 660
cagcttctaa tagagctata aactcacca catggcccaa ggttccattc gttggaatcc 720
atgaggccaa gaaccccagg tcagagaata aaaggcccgc cccatcttgg gag 773

<210> 68 <211> 10 <212> PRT <213> Homo sapiens <400> 68

Phe Leu Gly Glu Glu Cys Cys Tyr Tyr Val
1 5 10

<210> 69 <211> 10 <212> PRT <213> Homo sapiens <400> 69

Leu Leu Phe Gly Pro Cys Ile Phe Asn Leu
1 5 10

<210> 70 <211> 10 <212> PRT <213> Homo sapiens <400> 70

Cys Leu Pro Leu Asn Phe Arg Pro Tyr Val
1 5 10

<210> 71 <211> 10 <212> PRT <213> Homo sapiens <400> 71

Gly Leu Leu Ser Gln Trp Met Pro Trp Ile
1 5 10

<210> 72 <211> 9 <212> PRT <213> Homo sapiens <400> 72

Cys Leu Pro Ser Gly Ile Phe Phe Val
1 5

<210> 73 <211> 9 <212> PRT <213> Homo sapiens <400> 73

Trp Met Pro Trp Ile Leu Pro Phe Leu
1 5

<210> 74 <211> 10 <212> PRT <213> Homo sapiens <400> 74

Ile Arg Trp Val Thr Pro Pro Thr Gln Ile
1 5 10

<210> 75 <211> 10 <212> PRT <213> Homo sapiens <400> 75

Leu Arg Asn Thr Gly Pro Trp Gly Leu Leu
1 5 10

<210> 76 <211> 10 <212> PRT <213> Homo sapiens <400> 76

Leu Arg Thr His Thr Arg Leu Val Ser Leu
1 5 10

<210> 77 <211> 10 <212> PRT <213> Homo sapiens <400> 77

Lys Arg Val Pro Ile Leu Pro Phe Val Ile
1 5 10

<210> 78 <211> 10 <212> PRT <213> Homo sapiens <400> 78

Cys Arg Cys Met Thr Ser Ser Ser Pro Tyr
1 5 10

<210> 79 <211> 10 <212> PRT <213> Homo sapiens <400> 79

Thr Arg Val His Gly Thr Ser Ser Pro Tyr
5 10

<210> 80 <211> 10 <212> PRT <213> Homo sapiens <400> 80

Ala Arg Glu Lys His Val Lys Glu Val Ile
5 10

<210> 81 <211> 10 <212> PRT <213> Homo sapiens <400> 81

Ser Arg Ile Glu Ala Val Lys Leu Gln Met
1 5 10

<210> 82 <211> 10 <212> PRT <213> Homo sapiens <400> 82

Ser Gln Trp Met Pro Trp Ile Leu Pro Phe
1 5 10

<210> 83 <211> 9 <212> PRT <213> Homo sapiens <400> 83

Cys Tyr Tyr Val Asn Gln Ser Gly Ile
1 5

<210> 84 <211> 9 <212> PRT <213> Homo sapiens <400> 84

Phe Tyr Tyr Lys Leu Ser Gln Glu Leu
1 5

<210> 85 <211> 9 <212> PRT <213> Homo sapiens <400> 85

Thr Tyr Thr Thr Asn Ser Gln Cys Ile
1 5

<210> 86 <211> 9 <212> PRT <213> Homo sapiens <400> 86

Ser Phe Leu Val Pro Pro Met Thr Ile
1 5

<210> 87 <211> 9 <212> PRT <213> Homo sapiens <400> 87

Tyr Tyr Val Asn Gln Ser Gly Ile Val
1 5

<210> 88 <211> 9 <212> PRT <213> Homo sapiens <400> 88

Leu Phe Asn Thr Thr Leu Thr Gly Leu
1 5

<210> 89 <211> 9 <212> PRT <213> Homo sapiens <400> 89

Leu Phe Gly Pro Cys Ile Phe Asn Leu
1 5

<210> 90 <211> 9 <212> PRT <213> Homo sapiens <400> 90

Arg Trp Val Thr Pro Pro Thr Gln Ile
1 5

<210> 91 <211> 10 <212> PRT <213> Homo sapiens <400> 91

Leu Pro Phe Leu Gly Pro Leu Ala Ala Ile
1 5 10

<210> 92 <211> 10 <212> PRT <213> Homo sapiens <400> 92

Leu Pro Tyr His Ile Phe Leu Phe Thr Val
1 5 10

<210> 93 <211> 10 <212> PRT <213> Homo sapiens <400> 93

Gly Ala Leu Gly Thr Gly Ile Gly Gly Ile
1 5 10

<210> 94 <211> 10 <212> PRT <213> Homo sapiens <400> 94

Leu Pro Phe Val Ile Gly Ala Gly Val Leu
1 5 10

<210> 95 <211> 9 <212> PRT <213> Homo sapiens <400> 95

Arg Arg Pro Leu Asp Arg Pro Ala Ser
1 5

<210> 96 <211> 9 <212> PRT <213> Homo sapiens <400> 96

Phe Arg Pro Tyr Val Ser Ile Pro Val
1 5

<210> 97 <211> 9 <212> PRT <213> Homo sapiens <400> 97

Arg Arg Ala Leu Asp Leu Leu Thr Ala
1 5

<210> 98 <211> 9 <212> PRT <213> Homo sapiens <400> 98

Trp Arg Met Gln Arg Pro Gly Asn Ile
1 5

<210> 99 <211> 10 <212> PRT <213> Homo sapiens <400> 99

Asp Arg Ile Gln Arg Arg Ala Glu Glu Leu
5 10

<210> 100 <211> 10 <212> PRT <213> Homo sapiens <400> 100

Leu Arg Thr His Thr Arg Leu Val Ser Leu
5 10

<210> 101 <211> 10 <212> PRT <213> Homo sapiens <400> 101

Glu Arg Val Ala Asp Ser Leu Val Thr Leu
5 10

<210> 102 <211> 10 <212> PRT <213> Homo sapiens <400> 102

Leu Phe Gly Pro Cys Ile Phe Asn Leu Leu
1 5 10

<210> 103 <211> 10 <212> PRT <213> Homo sapiens <400> 103

Gln Phe Tyr Tyr Lys Leu Ser Gln Glu Leu
1 5 10

<210> 104 <211> 10 <212> PRT <213> Homo sapiens <400> 104

Gln Trp Met Pro Trp Ile Leu Pro Phe Leu
1 5 10

<210> 105 <211> 10 <212> PRT <213> Homo sapiens <400> 105

Cys Tyr Tyr Val Asn Gln Ser Gly Ile Val
1 5 10

<210> 106 <211> 10 <212> PRT <213> Homo sapiens <400> 106

Asn Phe Val Ser Ser Arg Ile Glu Ala Val
1 5 10

<210> 107 <211> 9 <212> PRT <213> Homo sapiens <400> 107

Gly Pro Leu Val Ser Asn Leu Glu Ile
1 5

<210> 108 <211> 9 <212> PRT <213> Homo sapiens <400> 108

Leu Pro Leu Asn Phe Arg Pro Tyr Val
1 5

<210> 109 <211> 10 <212> PRT <213> Homo sapiens <400> 109

Leu Pro Phe Leu Gly Pro Leu Ala Ala Ile
1 5 10

<210> 110 <211> 10 <212> PRT <213> Homo sapiens <400> 110

Glu Pro Lys Met Gln Ser Lys Thr Lys Ile
1 5 10

<210> 111 <211> 10 <212> PRT <213> Homo sapiens <400> 111

Leu Pro Tyr His Ile Phe Leu Phe Thr Val
1 5 10

<210> 112 <211> 9 <212> PRT <213> Homo sapiens <400> 112

Arg Glu Lys His Val Lys Glu Val Ile
5

<210> 113 <211> 10 <212> PRT <213> Homo sapiens <400> 113

Lys Pro Arg Asn Lys Arg Val Pro Ile Leu
1 5 10

<210> 114 <211> 9 <212> PRT <213> Homo sapiens <400> 114

Val Val Leu Gln Asn Arg Arg Ala Leu
1 5

<210> 115 <211> 10 <212> PRT <213> Homo sapiens <400> 115

Ala Val Val Leu Gln Asn Arg Arg Ala Leu
1 5 10

<210> 116 <211> 9 <212> PRT <213> Homo sapiens <400> 116

Leu Pro Phe Val Ile Gly Ala Gly Val
1 5

<210> 117 <211> 9 <212> PRT <213> Homo sapiens <400> 117

Asp Leu Tyr Ser Tyr Val Ile Ser Lys
1 5

<210> 118 <211> 10 <212> PRT <213> Homo sapiens <400> 118

Thr Glu Gln Asp Leu Tyr Ser Tyr Val Ile
1 5 10

<210> 119 <211> 2615 <212> DNA <213> Homo sapiens <400> 119
gaattccggg aagccagacg gttaacacag acaaagtgtc gccgtgacac tcggccctcc 60
agtgttgccg agaggcaaga gcagcgaccg cgcacctgtc cggccggagc tgggacgcgc 120
gcccggggcg ccggacgaag cgaggaggga ccgcccaggc tgccccaag tgtaactcca 180
gcactgtgag gtttcaggga ttggcagagg ggaccaaggg gacatgaaaa tggacatgga 240
ggatgcggat atgactctgt ggacagaggc tgagtttgaa gagaagtgtg catacattgt 300
ggacgaccac ccctgggatt ctggtgctga tggcgggtact tcggttcagg cggaggcatc 360
ctaccaagg aatctgcttt tcaagtatgc caccaacagt gaagaggtta ttggagtgat 420
gggtaaagaa tacataccaa agggcacacg ttttggaacc ctaatagggtg aaatctacac 480
gcatgacaca gttcctaaga acgccaacag gaaatatatt tggaggatct attccagagg 540
ggagcttcac cacttcattg acggctttaa tgaagagaaa agcaactgga tgcgctatgt 600
gaatccagca cactctcccc gggagcaaaa cctggctgcg tgtcagaacg ggatgaacat 660
gacttctac accattaagc ccctccctgc caaccaggaa cttcttgtgt ggtattgtcg 720
ggactttgca gaaaggcttc actaccctta tcccggagag ctgacaatga tgaatctcac 780
acaaacacag agcagtctaa agcaaccgag cactgagaaa aatgaactct gcccaaagaa 840
tgtcccaaag agagagtaca gcgtgaaaga aatcctaaaa ttggactcca acccctccaa 900
aggaaaggac ctctaccgtt ctaacatttc acccctcaca tcagaaaagg acctcgatga 960
ctttagaaga cgtggggagc ccgaaatgcc cttctacct cgggtcgttt accccatccg 1020
ggcccctctg ccagaagact ttttgaaagc ttccctggcc tacgggatcg agagaccac 1080
gtacatcact cgctccccca ttccatcctc caccactcca agcccctctg caagaagcag 1140
ccccgaccaa agcctcaaga gctccagccc tcacagcagc cctgggaata cgggtgtccc 1200
tgtggggccc ggtctcaag agcaccggga ctctacgct tacttgaacg cgtcctacgg 1260
cacggaaggt ttgggctcct accctggcta cgcaccctg cccacctcc cgccagcttt 1320
catcccctcg tacaacgctc actaccccaa gttcctcttg ccccctacg gcatgaattg 1380
taatggctg agcgtgtga gcagcatgaa tggcatcaac aactttggcc tcttcccag 1440

ctgtgtgccct gtctacagca atctcctcgg tgggggacgc ctgccccacc ccatgtctcaa 1500
 ccccaacttct ctcccgagct cgctgccctc agatggagcc cggaggttgc tccagccgga 1560
 gcatcccagg gaggtgcttg tcccggcgcc ccacagtgcc ttctccttta ccggggccgc 1620
 cgccagcatg aaggacaagg cctgtagccc cacaagcggg tctcccacgg cgggaacagc 1680
 cgccacggca gaacatgtgg tgcagcccaa agctacctca gcagcgatgg cagccccag 1740
 cagcgacgaa gccatgaatc tcattaaaaa caaaagaaac atgaccggct acaagacct 1800
 tccctacccg ctgaagaagc agaacggcaa gatcaagtac gaatgcaacg tttgcgcaa 1860
 gactttcggc cagctctcca atctgaaggt ccacctgaga gtgcacagtg gagaacggcc 1920
 tttcaaagt gtgacttgca acaagggtt tactcagctc gccacctgc agaaacacta 1980
 cctggtacac acgggagaaa agccacatga atgccaggtc tgccacaaga gatttagcag 2040
 caccagcaat ctcaagacct acctgcgact ccattctgga gagaaacct accaatgcaa 2100
 ggtgtgccct gccaaagtca ccagtttgt gcacctgaaa ctgcacaagc gtctgcacac 2160
 cggggagcgg ccccaagaat gctcccagtg ccacaagaac tacatccatc tctgtagcct 2220
 cagggttcac ctgaaaggga actgcgctgc ggccccggcg cctgggctgc ctttgaaga 2280
 ttgacctga atcaatgaag aaatcgagaa gtttgacatc agtgacaatg ctgaccggct 2340
 cgaggacgtg gaggatgaca tcagtgtgat ctctgtagtg gagaaggaaa ttctggccgt 2400
 ggtcagaaaa gagaaagaag aaactggcct gaaagtgtct ttgcaaagaa acatggggaa 2460
 tggactcctc tctcagggt gcagccttta tgagtcacat gatctacccc tcatgaagtt 2520
 gctcccagc aaccactac ctctggtacc tgtaaaggtc aaacaagaaa cagttgaacc 2580
 atggatcct taagattttc agaaaacact ttttt 2615

<210> 120 <211> 29 <212> PRT <213> Homo sapiens <400> 120

Leu Gln Asn Arg Arg Ala Leu Asp Leu Leu Thr Ala Glu Arg Gly Gly
 1 5 10 15

Thr Cys Leu Phe Leu Gly Glu Glu Cys Cys Tyr Tyr Val
 20 25

<210> 121 <211> 21 <212> DNA <213> Homo sapiens <400> 121
 cttcaaaca caaccaggag g

21

<210> 122 <211> 20 <212> DNA <213> Homo sapiens <400> 122
 ttggggaggt tggccgacga

20